

SAYAS TEST SERIES

HEALTH EDUCATION OFFICER (HEO) SCREENING EXAM- 2026

Explanation Section (Part-B2)

**[Detailed Explanations of Question
Section (Part-A)]**

Components of Explanation Section:

- **Answer key**
- **Detailed Explanation of Part (A)**

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Preface

Success in the Health Education Officer Screening Examination 2026 conducted by the Uttar Pradesh Public Service Commission requires more than merely studying facts. For excellent performance in the examination, along with subject knowledge, clear understanding of concepts, regular practice, effective time management, and strategic preparation in accordance with the nature of the examination are of particular importance. In the final stage of the examination, it becomes even more essential for candidates to comprehensively evaluate their preparation, identify their weaknesses, and strengthen their confidence through continuous practice in accordance with the actual examination. Keeping these requirements in mind, Sayas Test Series—Health Education Officer Screening Examination 2026 has been developed. Keeping in view the convenience of candidates, effectiveness of study, and better revision, this test series has been published in two independent sections. Section-A presents a compilation of question papers, which has already been published. Now, Section-B (Explanation Section) is being presented, in which detailed, factual, logical, and examination-oriented explanations of the answers to each question included in the question paper section have been provided. This Explanation Section will not only help candidates know the correct answers but will also assist them in understanding the fundamental concepts, related facts, and subject-specific contexts underlying each question. At the same time, this book will serve as a useful study material for quick and effective revision. An effort has been made to present the explanations of the questions in such a manner that candidates can reassess their preparation while also revising those topics from which questions are more likely to be asked in the examination. The objective of this test series is not merely to provide answers to the questions, but to develop conceptual clarity, factual strength, the ability to analyse questions, and an examination-oriented approach among candidates. The published question paper section and this Explanation Section together provide candidates with a comprehensive opportunity for practice, self-assessment, and effective revision at the final stage, in accordance with the actual examination. We have full confidence that both sections of the Sayas Test Series—Health Education Officer Screening Examination 2026 will play an important role in finalising your preparation, strengthening your subject understanding, overcoming deficiencies, and enhancing your confidence in the examination. This effort will prove to be a reliable companion in making your examination preparation more organised, effective, and result-oriented.

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Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-1

Answer key

1. (d)	2. (a)	3. (d)	4. (c)	5. (a)	6. (a)	7. (a)	8. (a)	9. (c)	10. (c)
11. (a)	12. (d)	13. (b)	14. (c)	15. (a)	16. (b)	17. (a)	18. (c)	19. (b)	20. (b)
21. (c)	22. (c)	23. (c)	24. (b)	25. (b)	26. (c)	27. (b)	28. (a)	29. (c)	30. (b)
31. (b)	32. (a)	33. (b)	34. (a)	35. (c)	36. (a)	37. (b)	38. (b)	39. (d)	40. (a)
41. (a)	42. (d)	43. (c)	44. (b)	45. (c)	46. (a)	47. (d)	48. (d)	49. (c)	50. (a)
51. (a)	52. (c)	53. (c)	54. (c)	55. (a)	56. (d)	57. (b)	58. (d)	59. (b)	60. (a)
61. (c)	62. (c)	63. (c)	64. (d)	65. (a)	66. (c)	67. (a)	68. (b)	69. (b)	70. (c)
71. (c)	72. (a)	73. (b)	74. (c)	75. (b)	76. (d)	77. (b)	78. (c)	79. (b)	80. (c)
81. (d)	82. (b)	83. (b)	84. (b)	85. (b)	86. (c)	87. (b)	88. (a)	89. (c)	90. (c)
91. (d)	92. (a)	93. (c)	94. (c)	95. (b)	96. (c)	97. (d)	98. (d)	99. (b)	100. (a)
101. (d)	102. (b)	103. (b)	104. (d)	105. (a)	106. (a)	107. (a)	108. (d)	109. (a)	110. (d)
111. (b)	112. (a)	113. (b)	114. (c)	115. (d)	116. (a)	117. (c)	118. (d)	119. (d)	120. (b)
121. (b)	122. (a)	123. (a)	124. (d)	125. (a)	126. (d)	127. (a)	128. (b)	129. (a)	130. (c)
131. (b)	132. (a)	133. (b)	134. (a)	135. (a)	136. (a)	137. (d)	138. (d)	139. (b)	140. (b)
141. (c)	142. (d)	143. (a)	144. (b)	145. (c)	146. (c)	147. (b)	148. (d)	149. (b)	150. (b)

Explanation

1. **Explanation:** In December 1929, the historic Lahore Session of the Indian National Congress was held under the presidency of Pandit Jawaharlal Nehru. At this session, the Congress passed a resolution declaring 'Purna Swaraj' (Complete Independence) as its ultimate objective, and Nehru strongly endorsed this goal in his presidential address. At midnight on 31 December 1929, Nehru hoisted the Indian national flag (the Tricolour) on the banks of the Ravi River in Lahore. Subsequently, on 2 January 1930, the Congress Working Committee resolved to observe 26 January 1930 as 'Purna Swaraj Day' (Independence Day).
2. **Explanation:** Sir James Outram and W. Taylor described the Revolt of 1857 as the result of a Hindu-Muslim conspiracy. According to Outram, it was a Muslim conspiracy in which Hindu grievances were exploited. John Lawrence and Seeley considered it merely a military revolt. John Seeley called it an unpatriotic and selfish soldiers revolt, which had neither local leadership nor the support of the common people. According to T.R. Holmes, it was a war between barbarism and civilization. Hence, option (a) is correctly matched.
3. **Explanation:** Fort William College was established in Calcutta by Wellesley, the then Governor-General of the East India Company, in 1800 AD. The legal and administrative regulations related to its formation were approved on July 10, 1800, while the college was officially and formally established on May 4, 1800. The main objective of establishing this college was to provide British civil servants with education in languages such as Persian, Hindustani, Bengali, etc., for administration in India, along with training in local laws, customs and administrative responsibilities. Therefore, statement (d) is false.
4. **Explanation:** The first Mongol invasion of India took place during the reign of Iltutmish. During the period of Alauddin Khalji, the Mongol invader Qutlugh Khwaja attacked Delhi, and at that time Alauddin Khalji himself organized the army near Delhi. During the period of Muhammad bin Tughlaq, a Mongol campaign was launched under the leadership of Tarmashirin. However, Muhammad bin Tughlaq captured Kalanaur and Peshawar and foiled the Mongol campaign. Hence, all three pairs are correct.
5. **Explanation:** In the Mughal administrative system, a Mansabdar was a military and administrative officer. A Mansabdar was paid either in cash or in the form of a jagir in return for military and administrative expenses and salary. The Mansabdars who received jagirs were called Jagirdars, but a Jagirdar did not get ownership of the land; instead, he received temporary/transferable revenue rights. In contrast, Zamindars were large landholders who had existed from earlier times. They collected land revenue from their area of influence and paid it to the state, and in return, they received a collection fee. Therefore, only statements 1, 3 and 4 are correct.
6. **Explanation:** The tenure of Viceroy Lord Mayo was from 1869 to 1872 AD, and he is remembered for educational and administrative reforms. For administrative reform, he issued a resolution on December 14, 1870, which was called the 'Mayo Resolution' or the 'Charter of Provincial Governments'. Under this, the first step was taken towards separating central and provincial finances. The provincial governments were given funds and administrative freedom for services such as prisons, education, and medical care. Therefore, the Reason correctly explains the Assertion.
7. **Explanation:** The first decipherment of the Brahmi script mainly began with inscriptions engraved on coins, especially bilingual legends, and later the same key was applied to stone inscriptions to give an almost complete form to the alphabet. The first scholar to accomplish this task was Sir James Prinsep, who is credited with reading the inscriptions of Ashoka. In the excavations of the sites of the Indus Valley Civilization, no evidence of temples or places of worship has been found. There is an absence of the depiction of the horse, although horse-related evidence has been found from Lothal, Surkotada and Kalibangan.
8. **Explanation:** The Indian Institute of Pulses Research (IIPR) is located in Kanpur, Uttar Pradesh. The current name of the Central Tobacco Research Institute is ICAR-National Institute for Research on Commercial Agriculture / ICAR-NIRCA, and it is located in Rajahmundry/Rajamahendravaram, Andhra Pradesh. The Sugarcane Breeding Institute is located in Coimbatore, Tamil Nadu. The Central Research Institute for Jute and Allied Fibres (CRIJAF) is located in Barrackpore, West Bengal. Therefore, the correct matching is A-1, B-2, C-3 and D-4.
9. **Explanation:** The old crystalline, metamorphic and igneous rocks of Peninsular India are extremely important from the point of view of mineral resources. Most of the metallic minerals are found in these rocks, while the major coal reserves are concentrated in the Damodar, Son, Mahanadi and Godavari valleys. The Vindhyan sequence is a sequence of sedimentary rocks, in which sandstone, shale and limestone are prominent. In contrast, the Dharwar rock system is economically very important, and minerals such as iron, gold and manganese are found in the regions associated with it. Therefore, option (c) is false.
10. **Explanation:** Tsunami is a Japanese word, which means "Harbour Wave." In the deep sea, the wavelength of a tsunami is very large and its height is generally very low. For this reason, ships in the deep sea usually cannot feel it. In the deep sea, the height of a tsunami is generally not more than 15 metres; therefore, the third statement is incorrect. When a tsunami enters shallow water near the coast, its speed and wavelength decrease, while the height of the wave increases. Hence, statements 1, 2 and 4 are correct.
11. **Explanation:** The drainage system of Peninsular India is older and more mature than the Himalayan drainage system. The Peninsular Plateau is made up of ancient, hard, and stable rocks. Therefore, the rivers here generally follow a relatively fixed course and do not change their course frequently. Meanders are usually formed due to lateral erosion in alluvial plains with gentle slopes. This tendency is generally less common in Peninsular rivers. Therefore, both the Assertion and the Reason are correct, and the Reason correctly explains the Assertion. Hence, option (a) is correct.
12. **Explanation:** The Narmada is a major west-flowing river of Peninsular India. It originates from the western flank of the Amarkantak Plateau. It flows through a rift valley located between the Vindhya range in the north and the Satpura range in the south. Its general direction of flow is from east to west. Finally, it joins the Gulf of Khambhat of the Arabian Sea to the south of Bharuch. Therefore, all the four given statements are correct. Hence, the correct answer is option (d).

- 13. Explanation:** Conservation of biodiversity and natural resources is necessary for sustainable development. Prevention and control of pollution is also an important part of it. Reducing poverty is a socio-economic requirement of sustainable development, because the aim of development is not only economic growth, but also to ensure a better quality of life for all. The environment and the economy are dependent on each other. Therefore, the fourth statement is incorrect. Sustainable development is development that meets the needs of the present generation while safeguarding the ability of future generations to meet their own needs.
- 14. Explanation:** Nitrogen, oxygen and argon are among the major permanent gases of the atmosphere. The percentage of permanent gases generally remains constant from day to day. Therefore, statements 1 and 2 are correct. According to Ferrel's law or the Coriolis effect, winds are deflected to the right in the Northern Hemisphere and to the left in the Southern Hemisphere. Hence, statement 3 is incorrect. The main source of energy for tropical cyclones is the latent heat released by the condensation of water vapour. Therefore, statement 4 is correct. Thus, a total of three statements are correct.
- 15. Explanation:** In the Indian Republic, the first session of the Uttar Pradesh State Legislative Assembly began on February 2, 1950, under the new Constitution. In this first session, Purushottam Das Tandon became the first Speaker of the Legislative Assembly. Before independence, in the United Provinces Legislative Assembly constituted in 1937, Purushottam Das Tandon had also become the Speaker of the Legislative Assembly on July 31, 1937, while Abdul Hakim became the Deputy Speaker. Therefore, statements 1 and 2 are correct, while statement 3 is incorrect.
- 16. Explanation:** According to the study material, Article 321 of the Constitution provides that additional functions may be assigned to the State Public Service Commission through an Act made by the State Legislature. These functions may relate not only to the services of the State but also to the services of any local authority, any other corporate body constituted by law, or any public institution. Therefore, in the context of Article 321, the scope of functions of the Commission cannot be expanded merely by an order of the State Government; rather, it can be expanded through an Act of the State Legislature.
- 17. Explanation:** Part III of the Indian Constitution provides the Right to Freedom under Articles 19 to 22. In this, Article 19 grants citizens six types of freedoms, including freedom of speech and expression. Article 20 provides protection in respect of conviction for offences. Article 21 provides protection of life and personal liberty. Article 21-A is related to the right to free and compulsory education for children from 6 to 14 years of age, while Article 22 provides protection against arrest and detention in certain cases.
- 18. Explanation:** In the Indian Constitution, the Right to Equality has been provided in 5 Articles, from Article 14 to Article 18. Article 14 is related to equality before law, Article 15 to prohibition of discrimination on grounds of religion, race, caste, sex or place of birth, and Article 16 to equality of opportunity in matters of public employment. Article 17 is related to the abolition of untouchability, and not to equality of opportunity in public employment. Therefore, option (c) is false.
- 19. Explanation:** Article 245 determines the territorial extent of laws made by Parliament and the State Legislatures. Article 246 determines the power to make laws on the subjects included in the Union List, State List and Concurrent List of the Seventh Schedule. For this reason, Articles 245 and 246 regulate the distribution of legislative powers between the Centre and the States. Article 4 provides that any law made under Article 2 or 3 shall contain such provisions for the amendment of the First and Fourth Schedules as may be necessary to give effect to the provisions of that law. Article 5 deals with citizenship at the commencement of the Constitution.
- 20. Explanation:** Agenda-21 was adopted in 1992 during the Earth Summit held in Rio de Janeiro, Brazil. It was a comprehensive action plan that provided guidance for action at the global, national and local levels for sustainable development. The Rio Declaration was also adopted at the same conference, but it was a separate principle-based document from Agenda-21. Therefore, statement 2 is incorrect. Agenda-21 later played an important role in preparing the historical and conceptual background for the 17 Sustainable Development Goals adopted in 2015. Hence, statements 1, 3 and 4 are correct.
- 21. Explanation:** The Integrated Child Development Services (ICDS) was launched on 2 October 1975. At present, ICDS/Anganwadi Services are operated under 'Saksham Anganwadi and POSHAN 2.0'. This mission integrates Anganwadi Services, POSHAN Abhiyaan and the Scheme for Adolescent Girls. Under this, services related to nutrition, health and early childhood care are provided to children, pregnant women, lactating mothers and adolescent girls aged 14-18 years in the specified areas. Its major services include supplementary nutrition, pre-primary non-formal education, nutrition and health education, immunization, health check-ups and referral services. The main medium of service delivery is Anganwadi Centres. Therefore, the correct answer is option (c).
- 22. Explanation:** The human development approach does not measure development only in terms of GDP or income growth. Its focus is on human beings, their capabilities, choices and quality of life. In this approach, importance is given to health, education, access to resources, a dignified standard of living, equal opportunities and freedom. Therefore, Statement-1 is incorrect. In a vast and diverse country like India, development is considered comprehensive only when it includes regional balance, social inclusion, equal opportunities and environmental sustainability. On this basis, balanced, inclusive and sustainable development is considered an appropriate approach. Hence, Statement-2 is correct.
- 23. Explanation:** Haemophilia is an X-linked recessive genetic disorder. In this disease, the process of blood clotting is affected; therefore, the first and second pairs are correct. This disease is mostly found in males, and females may generally be its carriers. In common colour blindness or Daltonism, there is mainly difficulty in distinguishing between red and green colours; therefore, the third pair is correct. Difficulty in identifying blue and yellow colours is associated with a less common colour-vision defect; it is not the main symptom of common colour blindness. Hence, the fourth pair is incorrect, and a total of three pairs are correct.
- 24. Explanation:** The National Commission on Agriculture (1976) gave an important suggestion for improving the agricultural marketing system. It recommended that, for the convenience of farmers, a regulated market should be available within every 5-kilometre radius. The

main objective of this recommendation was to reduce the transportation cost of farmers, protect them from exploitation by middlemen, and ensure a fair price for their produce. This suggestion was considered very important for strengthening the rural agricultural marketing structure.

25. **Explanation:** In India, the Acts and institutions related to agricultural marketing and plant protection developed gradually. First, in 1914, 'The Destructive Insects and Pests Act, 1914' was enacted. After this, in 1926, the 'Royal Commission on Agriculture' was constituted, and it submitted its report in 1928, in which emphasis was laid on agricultural marketing reforms. In 1935, the Directorate of Marketing and Inspection (DMI) was established, and in 1937, the Agricultural Produce (Grading and Marking) Act, 1937 was enacted. Hence, option (b) is correct.
26. **Explanation:** Various types of utilities are created in agricultural marketing. Form utility is created through processing, such as making flour from wheat or sugar from sugarcane. Place utility is created through transportation, because the product is moved from the production area to the consumption area. Similarly, time utility is obtained through storage, so that the product can be made available at the time of need. Therefore, all the three given pairs are correctly matched and option (c) is the correct answer.
27. **Explanation:** According to the given facts, Lindane is a highly purified gamma isomer of BHC and HCH, containing about 99% gamma isomer. Therefore, the first statement is correct. Endosulfan is highly toxic to fish and many aquatic organisms; therefore, the second statement is incorrect. Synthetic pyrethroids are effective in controlling insects even in small quantities and are considered relatively less toxic to mammals. Therefore, only the first and third statements are correct.
28. **Explanation:** Diamond is a crystalline allotrope of carbon and its relative density is about 3.5. Graphite is also an allotrope of carbon. It is a greyish-black, smooth and shiny substance, whose relative density is about 2.25. The third statement is incorrect because coal is not a liquid, but a solid carbon-rich fossil fuel. It is used as a fuel. Therefore, only statements 1 and 2 are correct.
29. **Explanation:** The unit of power is joule/second, which is defined as watt. Knot is the unit used to measure the speed of a sea vessel. The distance used

in navigation is measured in nautical miles. Therefore, nautical mile is a unit related to distance, not to the quantity of heat. The unit used to measure the quantity of heat is calorie. Hence, among the given options, the pair that states nautical mile as a unit of quantity of heat is mismatched.

30. **Explanation:** Brahmi, especially 'Bacopa monnieri', is also called Jalnimb/Jal-Brahmi, because it is generally found in moist or water-adjacent places. In traditional medicine, it is known as a Medhya herb for uses related to memory and concentration. Digestive properties are associated with mint, expectorant properties with tulsi, and year-round flowering along with traditional uses related to diabetes are associated with Sadabahar/Sadafuli. Therefore, option (b) is correct.
31. **Explanation:** The oil obtained from the seeds of Ratanjot or Jatropa is used for making bio-diesel. Therefore, Statement 1 is correct and Statement 2 is incorrect, because bio-diesel is obtained not from its leaves but from its seeds/seed oil. Jatropa is a flowering/angiosperm plant. It is a drought-tolerant plant and can survive with limited water, but adequate water is required for good or economic seed production. Therefore, Statements 1, 3 and 4 will be considered correct.
32. **Explanation:** Trypsin, ptyalin/tyalin and pepsin are digestive enzymes. Trypsin is secreted by the pancreas in the inactive form of trypsinogen and becomes active in the small intestine, where it helps in the digestion of proteins/peptides. Ptyalin/tyalin is salivary amylase, which is found in saliva and breaks down starch into maltose and dextrin. Pepsin is formed from pepsinogen in the stomach and helps in the digestion of proteins. Gastrin is not a digestive enzyme; rather, it is a peptide hormone that stimulates the secretion of gastric acid.
33. **Explanation:** When the number of cases of a disease in an area or population becomes higher than the normally expected number, it is called an epidemic. If a disease remains permanently or normally present in a particular area or population, it is called endemic. When an epidemic spreads to many countries or continents, it is called a pandemic. Zoonotic diseases are those diseases that can be naturally transmitted between animals and humans, especially from animals to humans; for example—rabies and Nipah.

34. **Explanation:** Both marasmus and kwashiorkor are disorders related to severe protein-energy malnutrition. In marasmus, due to long-term deficiency of energy/calories and protein, there is severe wasting of body fat and muscles, making the child extremely thin, and the skin may appear loose and wrinkled. The main feature of kwashiorkor is bilateral pitting edema, due to which the hands, feet, and face may swell. From the modern perspective, the development of kwashiorkor is not considered to be limited only to protein deficiency; it may involve multiple nutritional and metabolic factors. Therefore, only statements 1, 2, and 3 are correct.

35. **Explanation:** Behaviour Change Communication provides specific benefits in various health sectors. Sanitation and personal health-related behaviours, such as washing hands and using clean water, help prevent diseases like diarrhoea and typhoid. Maternal and child health programmes help reduce maternal and infant mortality rates through antenatal check-ups, safe/institutional delivery, postnatal care and breastfeeding. Nutrition and lifestyle, that is, a balanced diet and exercise, reduce the risk of diabetes and heart diseases. Reduction in liver diseases and mental health problems is related to Nasha Mukti Abhiyan, especially those concerning prevention of alcohol/drug abuse. Therefore, option (c) is false.

36. **Explanation:** According to the given material, physical resources include buildings, equipment and other materials; therefore, statement 1 is correct. Human resources include volunteers, experts, leadership, labour, experience, skills and employees; therefore, statement 2 is incorrect. Socio-organizational resources are related to various networks, groups and partner institutions; therefore, statement 4 is also incorrect. Moral resources are related to the organization's credibility, reputation, sympathetic support and public support; therefore, statement 3 is correct. Thus, only statements 1 and 3 are correct.

37. **Explanation:** The objective of health education is to motivate the individual and society to adopt such behaviours through which they can keep themselves and their families healthy. This statement is correct according to the given material. According to Dr. Thomas D. Wood, health education is not limited only to information about diseases; rather, health education is the sum total of all experiences that favourably influence the health-related

habits, knowledge and attitudes of individuals and communities. Hence, Statement-II is incorrect and the correct answer is option (b).

38. **Explanation:** The National Population Policy, 2000 was announced on February 15, 2000. Its immediate objective was to meet the unmet needs for health infrastructure, trained health personnel and contraceptives, and to ensure the integrated delivery of basic reproductive and child-health services. Its medium-term objective was to bring the Total Fertility Rate (TFR) to the replacement level of 2.1 by 2010. According to the given material, its long-term objective was not to achieve a stable population by the year 2030, but by 2045, at a level consistent with sustainable economic growth, social development and environmental protection. Therefore, statement 4 is incorrect.
39. **Explanation:** 'Taiwan Travelogue' is a book by Taiwanese writer Yang Shuang-zi, which was awarded the International Booker Prize 2026. This novel was translated from Mandarin Chinese into English by Lin King. Its story is set in the year 1938 and depicts the relationship between two women and the food culture in Taiwan, which was under Japanese colonial rule. It became the first work translated from Mandarin Chinese to win this award. Therefore, all the statements are correct.
40. **Explanation:** The official theme of the International Day for Biological Diversity 2026 is "Acting locally for global impact." This theme emphasizes that the achievement of global goals related to biodiversity conservation is possible only through efforts made at the local level. Under this, the active participation of local communities, cities, local bodies, indigenous communities, and every citizen has been encouraged. Along with this, the theme highlights the importance of local action in the effective implementation of the goals of the Kunming-Montreal Global Biodiversity Framework. Therefore, option (a) is correct.
41. **Explanation:** Prime Minister Narendra Modi was presented with the FAO Agricola Medal at the Food and Agriculture Organization (FAO) headquarters in Rome on 20 May 2026. This honour was conferred by FAO Director-General Qu Dongyu. The award was given in recognition of his contribution to sustainable agriculture, food security and rural development. The organization praised India's

financial inclusion initiatives for farmers, direct income support to more than 11 crore farmers, and the world's largest food security network covering about 80 crore people. Therefore, the reason clearly explains the statement.

42. **Explanation:** India's first "National AI Summit on Water 2026" was held in Bengaluru on 27 May 2026. It was hosted by the Bangalore Water Supply and Sewerage Board (BWSSB) in collaboration with Elets Technomedia. The objective of the summit was to promote digital technologies and artificial intelligence-based water management in urban water management, public service delivery, and solutions to the water crisis. Discussions were held on smart operations, digital twin, water loss management, energy optimization, data governance, and cybersecurity. Therefore, the statement about deliberations on agricultural policies in New Delhi is false.
43. **Explanation:** Under the agreement between India and Cambodia, India plans to provide 6 Bengal tigers from West Bengal, as tigers had become extinct in Cambodia in 2016. This initiative is being carried out under the supervision of the International Big Cat Alliance (IBCA) and the National Tiger Conservation Authority (NTCA). India has 58 tiger reserves and an estimated tiger population of 3,682. The third statement is false, because this will be the second such example in the world; the first example was in 2024, when Kazakhstan brought tigers from the Netherlands.
44. **Explanation:** The final of the Women's T20 World Cup 2026 was played between Australia and England at Lord's. In this match, England batted first and scored 150/4 in 20 overs, while Australia scored 153/3 in 17.1 overs and won the match by 7 wickets. With this victory, Australia won its seventh Women's T20 World Cup title. Therefore, statement 4 is incorrect. Hence, the correct answer is (b) 1, 2 and 3 only.
44. **Explanation:** The final of the Women's T20 World Cup 2026 was played between Australia and England at Lord's. In this match, England batted first and scored 150/4 in 20 overs, while Australia scored 153/3 in 17.1 overs and won the match by 7 wickets. With this victory, Australia won its seventh Women's T20 World Cup title. Therefore, statement 4 is incorrect. Hence, the correct answer is (b) 1, 2 and 3 only.

45. **Explanation-** According to option (a), taking $k = 3$

$$k = 3, k^2 + 3 = 12, k^3 + 5 = 32$$

According to option (b), taking $k = 7$
 $k = 7, k^2 + 3 = 52, k^3 + 5 = 348$

According to option (c), taking $k = 2$
 $k = 2, k^2 + 3 = 7, k^3 + 5 = 13$

(2, 7 and 13 are prime numbers)

According to option (d), $k = 4$ (composite number)

$$k = 4, k^2 + 3 = 19, k^3 + 5 = 69$$

From the above explanation, it is clear that option (c) is the correct answer.

46. **Explanation:** Number 429714

From option (a)

Divisibility by 3 – The sum of the digits should be divisible by 3.

Divisibility by 6 – The number should be divisible by both 2 and 3.

429714 → Ones digit = 4 (even)

[divisible by 2]

Sum of digits

$$= 4 + 2 + 9 + 7 + 1 + 4 = 27$$

(divisible by 3)

Therefore, the number 429714 is divisible by both 3 and 6.

Divisibility by 5 – The ones digit should be 0 or 5.

Divisibility by 4 – The last two digits of the number should be divisible by 4.

∴ The ones digit of the number 429714 is neither zero (0) nor 5, and its last two digits (14) are also not divisible by 4.

Therefore, the number 429714 is neither divisible by 5 nor by 4. Hence, the number 429714 is divisible only by 3 and 6.

47. **Explanation-** Initial population of the village = 20000

∴ Population of the village after 1 year = 23000

Percentage increase in population

$$= \left(\frac{23000 - 20000}{20000} \times 100 \right) \%$$

$$= \left(\frac{3000}{20000} \times 100 \right) \%$$

$$= 15\%$$

48. **Explanation-** Total toys = 75

Number of boys' toys = 18

∴ Number of girls' toys = 75 – 18 = 57

∴ Percentage of girls' toys

$$= \left(\frac{57}{75} \times 100 \right) \%$$

$$= \frac{1900}{25} \%$$

$$= 76\%$$

49. **Explanation-** Given that -

Volume of the cube = 13824 cm³

Let the side of the cube = a cm.

∴ Volume of the cube = (side)³

$$13824 = (a)^3$$

$$a = \sqrt[3]{13,824}$$

$$a = 24 \text{ cm.}$$

- 50. Explanation** – Let the side of the cube be a .
According to the question –
 $6a^2 = 294$
 $a^2 = 49$
 $a = \sqrt{49}$
 $a = 7 \text{ cm}$
Volume of the cube $= a^3$
 $= 7^3 = 343 \text{ cm}^3$
- 51. Explanation:** Emerson described health as the first wealth of human life. His view was that without health, all other material possessions become meaningless. Only a healthy person can effectively perform his personal, social and economic responsibilities. Therefore, health is considered the most valuable asset of life. This idea explains the overall importance of health and presents it as the basic foundation of human development.
- 52. Explanation:** Bacon described a healthy body as a guest house for the soul. J. F. Williams considered health to be a quality that makes a person long-lived and useful for society. According to Voltmer and Esslinger, health is a state of complete adjustment between the individual and his environment. Therefore, all three pairs are correct and option (c) is the correct answer.
- 53. Explanation:** The increasing contact between villages and cities has brought economic, cultural and political changes in rural society. In rural areas, the influence of tea stalls, modern marriage ceremonies and consumerist lifestyle has increased. Along with this, various castes and tribes have formed organizations to protect their rights. On the other hand, the importance of traditional institutions such as the jajmani system and the joint family has declined. Therefore, option (c) is correct.
- 54. Explanation:** Down syndrome is a chromosomal condition caused by an extra copy of chromosome 21. Common haemophilia A and B are hereditary disorders related to variants in the F8 and F9 genes respectively. Therefore, it is not appropriate to consider these diseases as the result of defects in the physical environment. Both statements are scientifically correct; hence option (c) is the correct answer.
- 55. Explanation:** The functionalist approach considers society as a balanced system. According to Parsons, illness is not only a biological condition but also a social deviance, because a sick person is unable to perform his social roles effectively. This affects the normal order of the family, workplace and society. Therefore, illness creates a disturbance in social balance and the reason correctly explains the assertion.
- 56. Explanation:** Capability poverty measurement is related not only to lack of income, but also to the lack of basic human capabilities. It examines whether people have the minimum capabilities for a healthy life, safe reproduction and acquiring knowledge. Therefore, underweight children, delivery without a trained health worker and adult female illiteracy are its major indicators. Lack of access to clean water is not included in capability poverty measurement; rather, it is related to the Human Poverty Index.
- 57. Explanation:** The concept of 'Sick role' was presented by Talcott Parsons in his book 'The Social System' in 1951. In this concept, illness is explained as a social role, under which the sick person gets certain rights and responsibilities. This concept is an important part of the functionalist perspective and emphasizes the preservation of social order.
- 58. Explanation:** The Human Development Index is an important indicator for understanding the state of human development in a country. It is mainly based on three basic dimensions—healthy life, education and a decent standard of living. Healthy life is generally measured by life expectancy, education by indicators related to schooling, and decent standard of living by income-related indicators. Gender equality is certainly an important social goal related to human development, but it is not a basic dimension of HDI. Separate indices, such as the Gender Development Index and the Gender Inequality Index, are used to understand gender equality and gender inequality. Hence, the correct answer is (d) Gender Equality.
- 59. Explanation:** According to Talcott Parsons, the doctor and the medical institution provide legitimacy to the patient's illness, due to which the patient gets temporary exemption from social responsibilities. Through treatment, the doctor helps the patient return to normal social roles. The concept of stigmatizing the patient is not a part of Parsons' model.
- 60. Explanation:** The 1979 Task Force has special importance in the history of poverty measurement in India. It linked the poverty line with minimum consumption and calorie requirement. According to it, the requirement of 2400 calories in rural areas and 2100 calories in urban areas per person per day was taken as the basis. For this reason, option (a) is correctly matched.
- The Lakdawala Committee was not related to the Human Development Index, but to the state-specific determination of the poverty line. The Tendulkar Committee gave importance to the methodology related to consumption expenditure and MRP-based MPCE in poverty measurement, not to the development of capability poverty measurement. The Gender Inequality Index is also not related to the 1979 Task Force. Therefore, the correct answer is only option (a).
- 61. Explanation:** Labelling theory is an important theory of the symbolic interactionist perspective. According to it, when a person is labelled as 'Sick' or 'Disabled' by society or the medical system, his social identity and self-image are affected. This theory is based on micro-level social interactions and the process of meaning-making; therefore, it is related to the interactionist perspective.
- 62. Explanation:** Oxytocin is called the 'love hormone' because it influences social behaviours such as trust, belongingness and emotional attachment. It plays a role in strengthening cooperation, social bonding and mutual trust among people. Although its effect may vary according to the person and the situation, it is considered especially important in the study of social behaviour and biological processes.
- 63. Explanation:** Anthropology does not study human beings from only one perspective, but studies them in a holistic manner. It attempts to understand the biological, social, cultural, linguistic, economic, religious and historical aspects of human life, along with their interrelationships. This holistic approach makes it distinct from other social sciences. Therefore, anthropology is called the 'holistic science of humankind' or 'Holistic Science'.
- 64. Explanation:** Medical anthropology makes a bio-cultural study of health, disease, local health beliefs, ethnomedicine and systems of treatment. The study of supernatural powers, religious beliefs and rituals is done under the 'anthropology of religion'. Political anthropology studies stateless societies and political systems, while the objective of development anthropology is to promote poverty eradication, economic welfare and dignified livelihood. Hence, option (d) is incorrectly matched.

65. **Explanation:** Biological anthropology studies humans as biological beings and analyses human evolution, adaptation and biological variations. Human palaeontology is also an important part of it. However, the study of supernatural powers, religious beliefs and the origin of religion comes under socio-cultural anthropology, especially the anthropology of religion. Therefore, the third statement is incorrect.
66. **Explanation:** The scope of economic anthropology is very broad. It is not limited only to modern societies, but comparatively studies all types of economic systems and organisations, from food-gathering societies to modern industrial economies. Its objective is to understand the economic structures and behaviours of different societies. Hence, option (c) is correct.
67. **Explanation:** Primatology studies living and extinct non-human primates. Forensic anthropology establishes identification on the basis of DNA, blood and skeletal remains in cases of crime or disaster. Ecological anthropology studies the interrelationships among humans, culture and environment, while linguistic anthropology analyses the structure, development and social role of language.
68. **Explanation:** In health administration, information is first provided to bring positive change in the habits of the community. On this basis, people are educated. Thereafter, the message is delivered to the community through communication media according to local conditions. This is called Information, Education and Communication (IEC). The ultimate objective of this entire process is to achieve Behaviour Change Communication (BCC).
69. **Explanation:** According to the life-cycle approach, safe pregnancy is first ensured through antenatal care. After this, institutional delivery is conducted. After birth, postnatal care is provided to the mother and the child. Later, during adolescence, attention is given to mental health, menstrual hygiene and other health needs. This is the prescribed sequence of health services.
70. **Explanation:** The status of public health is assessed through various indicators. Safe drinking water, sanitation and solid waste management are major indicators of environmental health, which play an important role in the prevention of communicable diseases. On the other hand, underweight comes under nutritional indicators, infant mortality rate under mortality-related indicators, and literacy under social indicators. Hence, option (c) is correct.
71. **Explanation:** The Health Education Officer acts as an important link between the community and the health system. His work is to spread health awareness, bring behavioural change, motivate people for vaccination, remove rumours and misconceptions, and connect people with health services. The clinical or surgical treatment of complex diseases is the work of specialist doctors.
72. **Explanation:** Karl Landsteiner discovered the ABO blood group system in 1900, which made safe blood transfusion possible. Later, in 1927, Landsteiner and Levine described the M.N. blood group system. Subsequently, Landsteiner and Wiener described the Rh factor in 1940 on the basis of a study related to the rhesus monkey. Therefore, option (a) is the correct answer.
73. **Explanation:** For safe blood transfusion, the ABO blood group of the donor and the recipient is first determined. After this, the Rh factor is tested. After these two tests, cross-matching is done so that the possibility of any immunological reaction can be eliminated. Only after the successful completion of all these steps is blood safely transfused to the patient.
74. **Explanation:** Blood is a fluid connective tissue whose nature is slightly alkaline and whose normal pH is about 7.4. The body of a healthy adult contains about 5–6 litres of blood, which is about 7–8 percent of the total body weight. On average, women have about one litre less blood than men. Therefore, all three statements are correct.
75. **Explanation:** The word 'Psychology' is considered to be derived from two Greek words, 'Psyche' and 'Logos'. 'Psyche' means soul, mind, breath or life-principle, and 'Logos' means study or science. In the modern context, psychology is not merely the study of the mind, but the systematic scientific study of mental processes, experiences and behaviour.
76. **Explanation:** Cognitive psychology studies mental processes such as attention, perception, memory, reasoning, problem-solving, decision-making and language. The study of workplace, organisational behaviour and productivity comes under industrial-organisational psychology. Behavioural psychology deals with general behaviour, abnormal psychology deals with mental disorders, and clinical psychology is related to the assessment, diagnosis, psychological treatment and prevention of psychological disorders.
77. **Explanation:** Professor Girindra Shekhar Bose founded the Indian Psychoanalytical Society in 1922. Therefore, statement 2 is correct. He did not become the Head of the Department of Psychology at the University of Calcutta in 1922; he took charge of the department later. Therefore, statement 1 is not correct. Bose was influenced by Freud's ideas and also corresponded with Freud, but there is no evidence of his formal training under Freud. Therefore, statement 3 is not correct.
78. **Explanation:** In Pavlov's classical conditioning experiment, food was the natural stimulus, which produced the natural response of salivation in the dog. Initially, the sound of the bell did not produce any specific response like salivation; therefore, the bell was a neutral stimulus. When food was repeatedly given immediately after ringing the bell, the dog learned the association between the bell and food. After this, salivation began merely at the sound of the bell, and the bell became a conditioned stimulus.
79. **Explanation:** In Skinner's experiment, the hungry rat initially moves here and there in the box and shows exploratory behaviour. During this, it accidentally presses the lever, due to which it gets food. After repetition of this process, the rat learns the relationship between the response of pressing the lever and the result of getting food. This is the basis of operant conditioning.
80. **Explanation:** Through learning, a person acquires new information. This information is stored in memory and is retrieved when needed. When previously learned or stored information cannot be recalled at the time of need, this condition is called forgetting. Therefore, the correct answer is option (c).
81. **Explanation:** Mental health assessment evaluates a person's emotional, cognitive and behavioural condition. It includes understanding mental health-related symptoms such as stress, anxiety, depression, fear and suicidal thoughts. Intelligence assessment evaluates cognitive ability, reasoning and learning capacity. Personality assessment understands a person's stable traits and behaviour patterns, while attitude assessment measures an evaluative tendency towards a person, object, idea or issue. Therefore, the most appropriate assessment here is mental health assessment.
82. **Explanation:** Maslow presented human needs in the form of a hierarchy. In this order, physiological needs come first, such as food, water, sleep, hunger and thirst. After these come the need for

safety, then the need for love and affinity, and after that the need for esteem. At the highest level is the need for self-actualization. In this, a person wants to fully realize his abilities and potential.

83. **Explanation:** Behavioural assessment is a systematic and scientific method of evaluation. In this, an attempt is made to understand a person's direct and observable behaviour in its real context. It is useful in health education because there may be a difference between what a person says and what he actually does. For example, taking medicine on time, staying away from addiction or adopting health-related habits—these are assessed on the basis of actual behaviour and behavioural indicators.
84. **Explanation:** In the Big Five personality model, extraversion is related to a person's social activity, sociability, communication, enthusiasm and tendency to connect with the external social world. Persons with high extraversion are generally more comfortable and active in group activities, communication and social participation. Therefore, the correct answer is (b). Acceptance of new ideas is related to 'openness', discipline and responsibility to 'conscientiousness', and anxiety and emotional instability to 'neuroticism'.
85. **Explanation:** The Nasha Mukh Bharat Abhiyaan was launched on 15 August 2020 by the Ministry of Social Justice and Empowerment. Initially, this campaign was started in 272 identified vulnerable districts. Its objective is to increase public awareness about substance abuse, strengthen prevention, and connect people with counselling, treatment and rehabilitation services. Special emphasis has been laid on the active participation of youth, women, children, educational institutions, youth clubs, civil society and the community in the campaign. Later, it was extended to all districts of the country.
86. **Explanation:** The role of a Health Education Officer is not punitive or only court-centred; rather, it is based on prevention and health promotion. Promoting peer education, life skills education, anti-drug awareness and early identification/screening of mental health among adolescents is an important role of the officer. This helps in preventing stress, peer pressure, drug addiction, violence and other risky behaviours. Therefore, the Health Education Officer acts as a bridge among the community, school, family and health system.

87. **Explanation:** The external form of human values may change according to time, society and circumstances, but their basic element is considered permanent and eternal. Values such as truth, compassion, selfless service, performance of duty and sacrifice have remained relevant in every age. The Indian tradition of thought has considered them not merely as principles but has accepted them as the basis of daily life and moral conduct.
88. **Explanation:** The family is the first and most important institution for the socialization of the child and the development of moral values. The doctrine of karma in the Indian tradition inspires a person to perform moral actions, avoid immoral actions and do good deeds. The third statement is incorrect because, according to modern psychology and biological studies, genetics and brain structure also play a role in the development of cooperation and collectivity.
89. **Explanation:** Social psychology studies how society influences the behaviour of an individual. Human values such as integrity, honesty, discipline and cooperation increase social unity and cooperation. This is why they are called 'Social Glue'. They provide moral direction to society and play an important role in maintaining social stability.
90. **Explanation:** According to Albert Bandura's Social Learning Theory, a person learns by observing the behaviour of others. Festinger presented the Social Comparison Theory, according to which a person evaluates his attitudes and abilities by comparing them with others. Both theories explain the role of the social environment, but their subject matter is different.
91. **Explanation:** Katz described four major functions of attitude—adaptive, knowledge, self-expressive, and ego-defensive. The ego-defensive function protects a person's self-esteem and helps him mentally accept his weaknesses. The other functions are respectively related to gaining benefits, understanding the world, and expressing one's values and identity.
92. **Explanation:** Karl Marx presented the concept of alienation of workers in capitalist society. Ferdinand Tönnies described the transition from traditional Gemeinschaft to modern Gesellschaft. Max Weber emphasized rationalization and bureaucratic control in modern society. Emile Durkheim gave the concept of organic solidarity arising as a result of division of labour.

93. **Explanation:** Vilfredo Pareto presented the theory of the circulation of elites. Auguste Comte gave the Law of Three Stages, Oswald Spengler considered society similar to an organism having birth, growth, and decline, and Arnold Toynbee presented the Challenge and Response Theory. Therefore, option (c) is the correct answer.
94. **Explanation:** According to Durkheim, division of labour does not make the individual independent; rather, due to specialized roles, individuals become more dependent on one another. This mutual dependence becomes the basis of organic solidarity. He also explained that if social change becomes too rapid, a condition of anomie may arise, in which social rules become weak.
95. **Explanation:** The process of communication begins with the sender, who gives the form of a message to his idea through encoding. The message reaches the receiver through a medium, where it is decoded and its meaning is understood. Finally, the receiver gives feedback, by which the communication process is completed. This is the standard sequence of effective communication.
96. **Explanation:** According to McGuire, people with low self-esteem may experience difficulty in understanding the message, while people with high self-esteem, even after understanding the message, have greater confidence in their own views and are not easily influenced. People with moderate self-esteem understand the message and also do not oppose it excessively; therefore, they are considered most receptive to persuasion.
97. **Explanation:** According to the Cognitive Dissonance Theory, a person gives priority to information that is in accordance with his pre-existing beliefs. Through selective exposure, he sees only that information; through selective perception, he understands it according to his own views; and through selective retention, he remembers only those points that support his beliefs. Logical objectivity is not a part of this process.
98. **Explanation:** The major determinants affecting health include genetic factors, lifestyle, environment, socio-economic status, and health services. In addition, age, sex, education, nutrition, and income also have an important effect on health. The position of planets is not considered a scientific determinant of health. Therefore, option (d) is the correct answer.

- 99. Explanation:** According to Article 24 of the Constitution, no child below the age of 14 years shall be employed to work in any factory or mine, nor shall he be engaged in any other hazardous employment. In addition, the Child and Adolescent Labour Act, 1986, as amended in 2016, generally prohibits the employment of children below the age of 14 years in any occupation or process. The only exceptions are family-based non-hazardous work and work in the entertainment industry, subject to prescribed conditions.
- 100. Explanation:** Article 32 provides the Right to Constitutional Remedies. Dr. B. R. Ambedkar considered it a very important article of the Constitution and called it the soul and heart of the Constitution. The reason is that it does not keep the Fundamental Rights merely declaratory, but provides an effective remedy in case of their violation. Thus, Article 32 is the constitutional guarantee for the protection of Fundamental Rights. The text also mentions that the Preamble of the Constitution is also considered the soul of the Constitution.
- 101. Explanation:** Under Article 25, the right to propagate religion, the power of the State to make laws for social reform, and the right of Sikhs to wear and carry kirpans are included. However, freedom of religion does not mean that any religious body or person can convert another person's religion by force, inducement, or fraud. According to the text, every adult person has the protected right to adopt or change religion by his own will, but it is valid only when there is no illegal pressure or deception.
- 102. Explanation:** According to Article 118(4) of the Constitution, the Speaker of the Lok Sabha presides over the joint sitting of both Houses of Parliament. According to the rules of procedure made under Article 118(3), if the Speaker of the Lok Sabha is absent, the Deputy Speaker of the Lok Sabha shall preside. If he is also absent, the Deputy Chairman of the Rajya Sabha shall preside. If he is also absent, the person determined by the members present in the joint sitting shall preside. Therefore, option (b) presents the correct sequence.
- 103. Explanation:** The provision regarding the composition of the State Legislative Council is given in Article 171 of the Constitution. According to Article 171(1), the total number of members of the Legislative Council shall not exceed one-third of the total number of members of the Legislative Assembly of that State. Also, the number of members in the Legislative Council of any State shall not be less than 40. Article 170 is related to the composition of Legislative Assemblies, Article 172 to the duration of State Legislatures, and Article 173 to the qualifications for membership of the State Legislature. Therefore, statement 4 is incorrect.
- 104. Explanation:** According to Article 58(1), for the office of President, a person must be a citizen of India, must have completed 35 years of age, and must be qualified to be elected as a member of the Lok Sabha. The text clearly states that for the office of President, it is necessary to be a citizen of India, not a citizen born in India. Also, it is not necessary for him to be a member of Parliament; rather, he must possess the qualification to be elected as a member of the Lok Sabha. Article 58(2) also lays down the disqualification related to holding an office of profit.
- 105. Explanation:** According to Article 55(3), the election of the President is held by the system of proportional representation by means of the single transferable vote, and the voting is secret. According to Article 54, the Electoral College includes the elected members of both Houses of Parliament, the elected members of the State Legislative Assemblies, and the elected members of the Legislative Assemblies of Delhi and Puducherry. The people do not directly participate in the election of the President; therefore, it is an indirect election.
- 106. Explanation:** Article 224 provides for the appointment of additional and acting judges in High Courts. According to Article 224(1), in the case of a temporary increase in work or arrears of work, the President may appoint a duly qualified person as an additional judge for a period not exceeding two years. Article 224(2) is related to acting judges. According to Article 224(3), an additional or acting judge shall not hold office after attaining the age of 62 years. Article 127 is related to ad hoc judges in the Supreme Court.
- 107. Explanation:** According to Article 243E, where Part IX of the Constitution applies, every Panchayat continues for a period of five years from the date appointed for its first meeting. The election to constitute the next Panchayat must be completed before the expiry of the prescribed duration of the existing Panchayat. If a Panchayat is dissolved earlier, elections must be held within 6 months from the date of dissolution, not within one year. The reconstituted Panchayat shall continue only for the remaining period. If the remaining period is less than 6 months, election is not necessary.
- 108. Explanation:** The 73rd Constitutional Amendment granted constitutional status to Panchayats. Under this amendment, provision was made for regular elections to Panchayats. Provision was also made for reservation of at least one-third of seats for women at all levels. To strengthen the financial position of Local Bodies, there is a provision for the constitution of a State Finance Commission by the Governor. In addition, under a law made by the State Legislature, powers and responsibilities may be assigned for plans and functions related to the subjects given in the Eleventh Schedule. The Eleventh Schedule contains 29 local subjects.
- 109. Explanation:** In Part E of the Second Schedule of the Indian Constitution, provisions related to the salary and conditions of service of the Comptroller and Auditor General are specified. According to Article 148(3), the salary and other conditions of service of the Comptroller and Auditor General shall be determined by Parliament by law. In pursuance of this, the Comptroller and Auditor General's Act, 1971 was passed, which is related to duties, powers, and conditions of service. According to Section 3 of this Act, the salary of the Comptroller and Auditor General is equal to that of the judges of the Supreme Court.
- 110. Explanation:** According to Article 280(3), the Finance Commission recommends the principles for the distribution of revenues between the Centre and the States and their allocation among the States. It also suggests the principles governing grants-in-aid to be given by the Union to the States. On the basis of the recommendations of the State Finance Commissions, it is also its function to suggest measures for augmenting the Consolidated Funds of the States to strengthen the resources of Panchayats and Municipalities. It may also make recommendations on any other matter referred to it by the President. Authorising withdrawal of money from the Consolidated Fund of India is the function of Parliament.
- 111. Explanation:** Health geography does not view health as limited only to disease or hospitals; rather, it sees it in a broader social and environmental context. Factors such as income, education, employment, gender, housing, and sanitation are considered major social determinants of health. Access to health services is not determined only by the distance from a hospital; factors such as roads, transport, economic condition, and women's safety also affect it. Therefore, Statement 2 is incorrect. The National Health Mission also views

health from a broader social perspective, such as nutrition, sanitation, safe drinking water, etc.

112. **Explanation:** Health geography emphasizes preparing health education according to the problems of a specific region. Where vaccination is low, counselling and awareness campaigns are necessary to remove misconceptions. For the problem of anaemia among adolescent girls, attention is given to iron-folic acid and menstrual hygiene. In water-scarce areas, safe water storage and purification are important. In pollution-affected areas, the use of masks and air quality monitoring are considered necessary. Therefore, option (a) is the correct matching.
113. **Explanation:** Even though hospitals and health facilities are available in urban areas, the actual access of poor sections remains limited. The reason for this is not only geographical distance, but also overcrowding in slums, weak health systems, social exclusion, and lack of health-related information. Due to these barriers, people are unable to receive proper consultation, investigation, and treatment on time. The National Urban Health Mission recognizes these challenges and emphasizes ensuring effective access to health services for the urban poor, especially slum dwellers and other vulnerable groups.
114. **Explanation:** Climate change affects human health in both direct and indirect ways. Rise in temperature, irregular rainfall, floods, droughts, and heat waves may increase the risk of health problems such as malaria, dengue, diarrhoea, vector-borne diseases, and heat stroke. Therefore, it is necessary to strengthen disease surveillance, early warning systems, safe water and sanitation, disaster preparedness, and training of health workers in the health system. Therefore, option (c) is correct.
115. **Explanation:** The National Air Quality Index issued by the Central Pollution Control Board includes six categories—Good, Satisfactory, Moderately Polluted, Poor, Very Poor and Severe. This index is based on the concentration of eight major pollutants, including PM₁₀, PM_{2.5}, SO₂, NO₂, CO, O₃, NH₃ and Pb (Lead). Air pollution increases the risk of serious diseases such as asthma, bronchitis and lung cancer. Therefore, sensitive groups should take special precautions during poor air quality. Hence, the statement of option (d) is false.
116. **Explanation:** The objective of the disaster preparedness phase is to prepare the community in advance for possible disasters. It includes dissemination of warnings, mock drills, and arrangement of emergency medicines and relief

materials. The Health Education Officer should work with ASHA, ANM, Anganwadi workers and teachers to prepare local awareness and preparedness plans. It is not appropriate to consider environmental risks only as natural events, because disasters may arise from natural or human-made causes, accidents or negligence. Hence, statements 1, 2 and 4 are true.

117. **Explanation:** Natural disasters are not limited only to physical damage; they also have a deep impact on mental health. Displacement, loss of livelihood and a feeling of insecurity may create problems such as stress, depression, insomnia and post-traumatic stress disorder among people. Therefore, the role of the Health Education Officer should not be limited only to distribution of medicines. He should also provide psychosocial counselling, community support and mental health assistance. This holistic approach makes disaster management effective.
118. **Explanation:** Genetic diseases are classified on the basis of their causes. Sickle cell anaemia is an autosomal recessive disease, in which defective gene copies are received from both parents. Down syndrome is a chromosomal disorder, in which an extra copy of the 21st chromosome is found. Haemophilia is an X-linked recessive disease and it is mainly seen more in males. Huntington's disease is an autosomal dominant disease, in which the disease may appear due to only one defective gene. Hence, all four pairs are correct.
119. **Explanation:** Mitochondria are considered the energy-producing units of the cell and they have their own DNA. When mutation occurs in mitochondrial DNA, mitochondrial diseases are produced. MELAS syndrome is one such disease, in which symptoms such as muscle weakness, seizures and stroke are seen. These diseases especially affect those organs which require more energy, such as the brain, heart and muscles. Therefore, all the statements are correct.
120. **Explanation:** The effect of malnutrition is not limited to only one person; rather, it continues from generation to generation. If an adolescent girl suffers from nutritional deficiency, her health remains weak during pregnancy in the future. The child born to such a woman has low birth weight and weak immunity. This condition is called the "inter-generational cycle of malnutrition." This concept shows that paying attention to the nutrition of adolescent girls is extremely important for both maternal and child health.

121. **Explanation:** Primary health care is the foundation of the health system because it makes identification and treatment of diseases possible at an early stage. If sub-centres and primary health centres are strengthened, diseases can be controlled before they take a serious form. This reduces unnecessary pressure on secondary and tertiary centres such as AIIMS, medical colleges and super-speciality hospitals. Therefore, strong primary health care is called the foundation of the health system.

122. **Explanation:** Ayushman Bharat Pradhan Mantri Jan Arogya Yojana is described as one of the world's largest public health insurance schemes. Under this scheme, eligible families are provided cashless treatment of up to ₹5 lakh per year in case of hospitalization. In 2024, the government decided to expand the scheme by including all senior citizens aged 70 years and above. Its objective is to help provide financial security and better health facilities to the elderly.
123. **Explanation:** Antimicrobial resistance occurs when microorganisms develop resistance against medicines. Due to this, even the treatment of common infections becomes difficult. Inappropriate and excessive use of antibiotics, taking medicines on one's own without medical advice, and not completing the full course of medicine are its major causes. As a result, bacteria become resistant to medicines. Therefore, statement 4 is incorrect, because not completing the prescribed course of medicine is included among the major causes related to resistance.
124. **Explanation:** Some social groups are more vulnerable to health risks; therefore, special health strategies are needed for them. Migrant labourers and the urban poor are more affected due to overcrowding, poor sanitation and limited health facilities. Tribal communities and persons with disabilities face difficulties in accessing health services. TB patients and HIV-positive persons are more vulnerable to infections due to weak immunity. Therefore, all the given groups come under the vulnerable category.
125. **Explanation:** The works related to water resource management in the Girnar region before the Common Era are associated with Chandragupta Maurya and Ashoka. Pushyagupta Vaishya, the governor of Chandragupta Maurya's western province, had the Sudarshana Lake excavated. During Ashoka's time, Tushaspha had canals drawn from it in the third century BCE. The name of Rudradaman I is also associated with this lake, but his work belonged to the second century CE, around 150 CE. Therefore, the third statement is incorrect.

- 126. Explanation:** The Barabar and Nagarjuni hills are located in Jehanabad district of Bihar. There are 3 caves in Nagarjuni, while a total of 4 caves are located on the hill called Barabar. Out of the four Barabar caves, Ashokan inscriptions have been found engraved on the walls of three caves. These inscriptions mention the donation of caves for the residence of monks of the Ajivika sect. The fourth cave, the Lomas Rishi Cave, does not have an Ashokan inscription. Two inscriptions have been found at the entrance of this cave, which mention the post-Gupta period Maukhari rulers Shardulavarman and his son Anantavarman.
- 127. Explanation:** The Arasavalli Temple is an important 7th-century Sun Temple located in Arasavalli village of Andhra Pradesh. It is considered to be associated with Devendra Varma, a ruler of the Eastern Ganga dynasty. Omkareshwar Temple is located in Khandwa district of Madhya Pradesh and is one of the twelve Jyotirlingas of Lord Shiva. Amarkantak is the source of the Narmada, Son and Johila rivers. Jwaleshwar or Jaleshwar Mahadev Temple is located near Amarkantak and is dedicated to Lord Shiva.
- 128. Explanation:** Syed Ahmad Khan wrote the book "Asbab-e-Baghawat-e-Hind" in Urdu in 1858. In this book, he analysed the causes of the Revolt of 1857. Later, two of his European friends translated this book into English under the title "Causes of the Indian Revolt". Therefore, it would not be correct to say that the book was originally written in English or that its English translation was done by Syed Ahmad Khan himself. This book was related to the Revolt of 1857, not to the Santhal Rebellion.
- 129. Explanation:** Mangal Pandey was hanged on 8 April, 1857. The reason was his attack on British officers on 29 March, 1857. Hazrat Mahal led the revolt in Lucknow in the name of her son Birjis Qadr/Kadir. On the other hand, Nana Sahib did not lead the revolt in Bareilly; he led the revolt in Kanpur. Therefore, the first three statements are correct, while the fourth statement is incorrect.
- 130. Explanation:** The Santhal Rebellion began in July, 1855. To suppress the Santhals, Major Burrough from Calcutta and a military detachment from Purnea were sent, but they were defeated by the Santhals in a battle at the field of Pirpainti near Bhagalpur. This rebellion was led by Sidhu and Kanhu. The main centre of the Santhal Rebellion lies in the present-day Santhal Pargana region of Jharkhand. According to the available historical material, the Santhals did not have dominance over the Ganga Valley region. Therefore, the fourth statement is incorrect.
- 131. Explanation:** In the Alipore Conspiracy Case, 1908, 39 people, including Aurobindo Ghose and his brother Barindra Ghose, were accused of serious charges such as conspiracy against British rule, preparation for waging war and collecting arms and ammunition. Among them, government witness Narendra Nath Gosain was killed by Kanailal Dutt and Satyendra Nath Bose before the trial began. Both were sentenced to death for this act. Out of the remaining 36 accused, 19 were convicted, while 17 people, including Aurobindo Ghose, were acquitted. Aurobindo Ghose was defended by Chittaranjan Das.
- 132. Explanation:** The Kakori incident, also known as the Kakori Train Action, took place on 9 August, 1925. After this incident, a total of 43 Indian revolutionaries were arrested. Ram Prasad Bismil, Ashfaqulla Khan, Roshan Singh and Rajendra Lahiri were tried and sentenced to death. Ram Prasad Bismil was hanged in Gorakhpur Jail, Rajendra Lahiri in Gonda, Roshan Singh in Allahabad (Prayagraj), and Ashfaqulla Khan in Faizabad (Ayodhya).
- 133. Explanation:** In the Calcutta Session of the Congress in 1928, the British Government was given an ultimatum to accept the Nehru Report within one year. When no definite response was received from the government, the Lahore Session was held in December, 1929 under the presidency of Pt. Jawaharlal Nehru. In this session, Purna Swaraj was declared the goal of the Congress. At midnight on 31 December, 1929, Nehru hoisted the tricolour on the bank of the Ravi River in Lahore. On 2 January, 1930, the Congress Working Committee decided to observe 26 January as Purna Swaraj Day.
- 134. Explanation:** The Jawaharlal Nehru, Vallabhbhai Patel and Pattabhi Sitaramayya Committee was named after the first letters of the names of its three members. This committee was formed in December, 1948 and submitted its report in April, 1949. The report did not support the immediate formation of linguistic states. The committee believed that national unity, political stability and administrative efficiency were more important for newly independent India. Therefore, the statement is correct and the reason is also correct. The reason clearly explains why the committee did not support the immediate formation of linguistic states.
- 135. Explanation:** The sequence of events of the French Revolution is clear. On 17 June, 1789, the Third Estate declared itself the National Assembly. After this, the Tennis Court Oath took place on 20 June, 1789. On 14 July, 1789, the Bastille was stormed, which was an important event of the Revolution. After this, on 4 August, 1789, the National Assembly took the historic decision to abolish feudal privileges, tax exemptions and birth-based rights. This decision was an important change towards social equality in France.
- 136. Explanation:** Enlightenment thinkers played an important role in strengthening the ideological foundation of the French Revolution. Rousseau presented the theory of social contract and the general will of the people in "The Social Contract". Montesquieu gave the theory of separation of powers in "The Spirit of Laws". Voltaire opposed religious intolerance, superstition and the corruption of the Church. These ideas strengthened the concepts of liberty, equality and rational governance. Therefore, all three pairs are correctly matched.
- 137. Explanation:** All the four pairs related to the Industrial Revolution are correct. James Hargreaves invented the Spinning Jenny, which increased the speed of yarn production. Eli Whitney invented the Cotton Gin, which simplified the process of separating seeds from cotton. James Watt made important improvements in the steam engine, which accelerated the Industrial Revolution. James Brindley was associated with the construction of the Bridgewater Canal. This canal helped in reducing transportation costs. Therefore, the correct answer is all four pairs.
- 138. Explanation:** Winston Churchill was the Prime Minister of Britain from 1940 to 1945 during the Second World War. General de Gaulle led the French Resistance Movement. Mussolini was the founder of Fascism in Italy, while Adolf Hitler was the leader of Nazism in Germany. Major events of the war included Germany's attack on the Soviet Union under Operation Barbarossa in June 1941. After this, Japan attacked Pearl Harbor in December 1941. The Battle of Stalingrad took place in 1942-43, and the second front was opened in Normandy in June 1944.
- 139. Explanation:** Performing surgery in district hospitals is not the work of a Community Health Officer. Their main

role is to strengthen comprehensive primary health services through the primary health team at Ayushman Arogya Mandirs, especially at the sub-health centre level. They assist in the early identification of common diseases, medicine management, screening of non-communicable diseases, and telemedicine-based consultation. In contrast, ASHA workers act as a link between the community and the health system, while ANMs and Anganwadi workers perform roles related to immunization, nutrition, and maternal-child care at the rural level.

- 140. Explanation:** e-Sanjeevani is India's national telemedicine service, which has become an important part of digital health services and public healthcare delivery. Its main objective is to provide easy and quick online consultation from specialist doctors to people living in remote, rural, and difficult areas. This reduces patients' travel expenses, increases access to specialists, and enables early identification of serious diseases at the primary level itself. Therefore, option (b) is correct as per the given fact.
- 141. Explanation:** Panchayati Raj Institutions are not merely administrative bodies, but institutions of local self-government. They play a role in local planning, coordination, monitoring, and accountability in rural health services. These institutions have a major role in the formulation of health plans, their regular monitoring, and especially in social audit. Due to public participation, health services become more accountable to local needs. The local health system functions through subdivisions, gram panchayats, and district councils. Therefore, option (c) is the most appropriate answer.
- 142. Explanation:** All the given pairs are correctly matched. Health Impact Assessment is especially recommended to be made an integral part of urban planning, because construction work, lack of green areas, and pollution in cities negatively affect health. Ward committees increase citizen participation and accountability at the local level. Early warning systems help in timely prevention by identifying epidemics like dengue at an early stage. Mobile Health Units provide primary healthcare in unorganized and slum settlements. Therefore, the correct answer is all four.
- 143. Explanation:** The Eleventh Schedule of the Indian Constitution includes several important subjects related to the

jurisdiction of panchayats. These mainly include health and sanitation, clean drinking water, women and child development, roads, and poverty alleviation programmes. The second statement is incorrect because rural health is not limited only to hospitals, doctors, or medicines. It is also related to safe drinking water, better nutrition, sanitation, primary education, environmental protection, and effective local governance. Therefore, only the first statement is correct.

- 144. Explanation:** Panchayati Raj Institutions function as the basic and effective unit of rural local governance. Decentralized plan formulation is a systematic process. First of all, local problems and development plans are identified through Gram Sabha and local meetings. After this, the plan is prepared according to needs and priorities. Once the policy framework is prepared, the plan is implemented. Finally, it is monitored to ensure effectiveness and transparency. Therefore, the correct sequence is identification, formulation, implementation, and monitoring.
- 145. Explanation:** In India's federal structure, public health, sanitation, hospitals, and dispensaries are mainly subjects of the State List. This means that the direct management and implementation of health services are mainly the responsibility of state governments. NITI Aayog does not have direct executive power to implement health schemes directly. It functions as a premier public policy think tank. Its role is to promote policy consultation, coordination, technical advice, and reforms between the Centre and the states. It strengthens cooperative federalism through a bottom-up policy process.
- 146. Explanation:** The concept of health governance is not limited only to the expansion of medical facilities or increasing the number of beds in hospitals. Its objective is to make health services equally accessible and affordable to all sections of society and to provide equal health protection especially to economically weaker and deprived sections. It links health with broader parameters such as education, nutrition, sanitation, and social security. Therefore, its ultimate objective is not only the treatment of disease, but the creation of a healthy society through a prevention and health-promotion based system.

- 147. Explanation:** Malnutrition has serious effects on children, women, and society. Especially in the case of undernutrition, it may cause conditions such as stunting, underweight, or wasting in children, and also reduces brain development and educational ability. In malnourished pregnant women, anemia and weakness increase the risk of giving birth to low-birth-weight babies. Malnutrition also weakens human capital formation and economic productivity by increasing healthcare expenditure. The fourth statement is incorrect because, according to the World Health Organization, malnutrition includes not only undernutrition but also overweight and obesity.

- 148. Explanation:** Among the given options, the matching of wasting is incorrect. Wasting does not mean low weight according to age; rather, it means that a child's weight is very low in proportion to height. It may result from lack of adequate food or illness. Stunting means low height in proportion to age due to long-term nutritional deficiency. Underweight is the condition of low weight according to age. Kwashiorkor is a severe form of protein-energy malnutrition, mainly caused by extreme deficiency of protein.

- 149. Explanation:** A district hospital is the main centre of secondary healthcare in any district. Its functions include important services such as treatment of serious diseases, surgery, emergency services, maternal and child healthcare, public health services and birth-death registration.

However, awarding degrees in health education, conducting intensive research work and providing highly advanced tertiary treatment are primarily the objectives of medical colleges, not of an ordinary district hospital. Therefore, option (b) is not a core function of a district hospital.

- 150. Explanation:** According to the 2011 Census, Bihar was the state with the highest population density, with a density of 1106 persons per square kilometre. It was followed by West Bengal, Kerala, Uttar Pradesh, and Haryana. The highest percentage change in India's unadjusted decadal growth rate was recorded in the 1971 Census, that is, the decadal growth rate of 1961–71 was 24.80 percent. According to the 2011 Census, the decadal growth rate was 17.7 percent. The fourth statement is incorrect because the state with the highest population density was not Kerala, but Bihar.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-2

Answer key

1. (c)	2. (c)	3. (b)	4. (c)	5. (d)	6. (b)	7. (a)	8. (a)	9. (b)	10. (a)
11. (b)	12. (a)	13. (a)	14. (a)	15. (b)	16. (c)	17. (c)	18. (b)	19. (b)	20. (d)
21. (b)	22. (a)	23. (b)	24. (b)	25. (a)	26. (a)	27. (b)	28. (d)	29. (d)	30. (d)
31. (d)	32. (d)	33. (a)	34. (b)	35. (b)	36. (b)	37. (c)	38. (a)	39. (a)	40. (b)
41. (c)	42. (a)	43. (a)	44. (d)	45. (a)	46. (c)	47. (d)	48. (d)	49. (c)	50. (a)
51. (a)	52. (a)	53. (b)	54. (a)	55. (b)	56. (a)	57. (a)	58. (a)	59. (c)	60. (d)
61. (b)	62. (d)	63. (c)	64. (b)	65. (d)	66. (c)	67. (b)	68. (b)	69. (a)	70. (b)
71. (a)	72. (c)	73. (d)	74. (a)	75. (b)	76. (a)	77. (c)	78. (a)	79. (b)	80. (b)
81. (d)	82. (c)	83. (c)	84. (c)	85. (d)	86. (b)	87. (c)	88. (c)	89. (b)	90. (b)
91. (a)	92. (b)	93. (d)	94. (b)	95. (c)	96. (c)	97. (d)	98. (d)	99. (b)	100. (b)
101. (c)	102. (b)	103. (d)	104. (b)	105. (c)	106. (b)	107. (c)	108. (c)	109. (b)	110. (a)
111. (d)	112. (c)	113. (a)	114. (a)	115. (a)	116. (b)	117. (a)	118. (a)	119. (b)	120. (c)
121. (a)	122. (d)	123. (b)	124. (a)	125. (b)	126. (a)	127. (b)	128. (d)	129. (a)	130. (b)
131. (a)	132. (a)	133. (b)	134. (b)	135. (a)	136. (b)	137. (d)	138. (a)	139. (a)	140. (d)
141. (d)	142. (c)	143. (a)	144. (c)	145. (b)	146. (c)	147. (d)	148. (d)	149. (b)	150. (b)

Explanation

1. **Explanation:** Mechanical engineer Dr Girish Bharadwaj passed away on 7 July 2026. A resident of Sullia in the Dakshina Kannada district of Karnataka, Dr Girish Bharadwaj was renowned throughout the country as the 'Bridge Man of India'. He constructed his first suspension bridge over the Payaswini River in 1989. For his remarkable contribution to rural connectivity and social service, the Government of India honoured him with the Padma Shri in 2017.
2. **Explanation:** On 18 June 2026, Indian-origin theoretical physicist Professor Jainendra K. Jain was awarded the 2026 Wolf Prize in Physics. He became the first Indian to receive the prestigious Wolf Prize in Physics. The award was presented by Israeli President Isaac Herzog at a ceremony held in the Knesset. The award includes a diploma, a Medal of Honour and a sum of 100,000 US dollars.
3. **Explanation:** On 24 June 2026, Bangladesh became a new member of the International Big Cat Alliance (IBCA). With this, the total number of member countries of this treaty-based global organisation has now reached 27. The IBCA was established with the objective of conserving seven big cats—tiger, lion, leopard, snow leopard, cheetah, jaguar and puma. Twenty-seven countries are members of the alliance, while five other countries are part of the alliance as observers.
4. **Explanation:** - In May 2026, Justice Surya Kant, Chief Justice of India, announced the constitution of a high-level committee to prepare a roadmap for the modernisation of courts across the country. The Judicial Infrastructure Advisory Committee will address infrastructure-related deficiencies in the courts. The committee has been constituted under the chairmanship of Justice Aravind Kumar. By 31 August 2026, the committee will submit its detailed findings and particulars of the funds required to Sanjeev Sanyal, Member of the Economic Advisory Council to the Prime Minister.
5. **Explanation:** - On 23 May 2026, the 'Governance Summit 2026: Inclusive Artificial Intelligence (AI) for Viksit Bharat' conference was organised at the Mohali campus of the Indian School of Business (ISB). It was organised by the Bharti Institute of Public Policy of the Indian School of Business (ISB), in collaboration with the Ministry of Electronics and Information Technology (METI). Senior government officials, industrialists, academics and various representatives participated in the conference.
6. **Explanation:** International Fruit Day was observed on 1 July 2026. Its main theme was 'Plant, Learn, Celebrate'. 'Dates' were selected as the 'Fruit of the Year' for this year. The main objective of this day is to make people aware of the health benefits of fruits. The observance of this day began in Berlin, Germany, in 2007.
7. **Explanation:** R. H. Painter is regarded as the father of host plant resistance. This concept refers to the inherent resistance of crops to pests. Painter identified three principal mechanisms of resistance—non-preference, antibiosis and tolerance. Gene-based resistance includes vertical resistance and horizontal resistance. The economic threshold level and the ecosystem are separate concepts. Therefore, option (a) is correct.
8. **Explanation:** The critical stages of irrigation have been accorded special importance. In maize, the most critical period for moisture stress is the flowering stage, namely tasselling and silking. In groundnut, flowering, pegging and pod development are the most important stages for irrigation. In cotton, square formation, flowering and boll development are important, whereas booting and flowering are the sensitive stages in jowar. Therefore, option (a) presents the correct matching.
9. **Explanation:** Puddling is an important land-preparation process in paddy cultivation. In this process, the soil is churned with water to form a soft and less permeable layer. Its purpose is to reduce water seepage and prevent the loss of nutrients through leaching. Paddy is a crop grown under flooded conditions; therefore, the capacity of the field to retain water is very important. Puddling serves this purpose and facilitates the successful cultivation of paddy.
10. **Explanation:** Cotton is a deep-rooted crop, and black cotton soil is considered the most suitable for it. Such soil should possess good drainage and aeration along with water-holding capacity. Well-drained light sandy or sandy loam soil is suitable for groundnut because it facilitates the penetration of pegs into the soil. Maize is highly sensitive to waterlogging; therefore, it should be sown along the sides of ridges. Hence, the third pair is incorrect.
11. **Explanation:** The major components of the National Health Mission include health-system strengthening and reproductive, maternal, newborn, child and adolescent health and nutrition. Its other components include communicable-disease control, non-communicable-disease control and infrastructure maintenance. Defence, higher education and road construction are not components of its programme. Therefore, option (b) is correct.
12. **Explanation:** Behaviour Change Communication is multi-modal. It involves the coordinated use of individual counselling, family and group dialogue, community meetings, posters and leaflets, radio, television, mobile messages and social media. School-based activities may also support it. Health workers, ASHA workers and Anganwadi workers, teachers, Panchayat representatives and other trusted local influencers help to dispel people's doubts and motivate them to adopt appropriate behaviour. Therefore, option (a) is correct.
13. **Explanation:** In 1952, India became the first country in the world to launch a National Family Planning Programme. The National Population Policy, 2000 was adopted on 15 February 2000. Its immediate objective was to meet the unmet needs for contraceptive methods, health infrastructure and health personnel, and to provide integrated basic reproductive and child health services. Its medium-term objective was to bring the Total Fertility Rate down to the replacement level of 2.1 by 2010, while its long-term objective was to achieve a stable population by 2045. Therefore, option (a) is correct.
14. **Explanation:** In Behaviour Change Communication, the message should be simple, clear and in the familiar local language of the target community so that people can easily understand it and adopt the desired behaviour. Excessively technical and complex terms should be avoided. The message should be culturally sensitive, respectful and delivered by a credible source, and it should not involve blame or induce shame or unnecessary fear. Where the suggested behaviour depends upon a service or resource, its availability and accessibility should also be ensured. Therefore, option (a) is correct.
15. **Explanation:** The Brahmaputra River is considered to originate from the Chemayungdung/Angsi glacier region near the Kailash-Mansarovar region in Tibet. It is known as the Tsangpo in Tibet, the Dihang or Siang in Arunachal Pradesh, the

Brahmaputra in Assam and the Jamuna in Bangladesh. Padma is the name of the Ganga in Bangladesh. Therefore, option (b) is correct for the name of the Brahmaputra in Arunachal Pradesh.

16. **Explanation:** Immediately below the Earth's crust lies the mantle layer, which extends to a depth of 2,900 kilometres. The layer located beneath the mantle is called the core. It is composed mainly of nickel and iron and is therefore known as the Nife layer. Owing to the predominance of silica and aluminium, the crust is called Sial, whereas the mantle is called Sima because of the predominance of silica and magnesium. Therefore, option (c) is correct for the core.
17. **Explanation:** A light-year is defined as the distance travelled by light in a vacuum in one year. It is a unit used to measure astronomical distances. The speed of light is 3×10^8 metres per second. Since the word 'year' appears in its name, it is sometimes mistaken for a unit of time, but it is a unit of distance. A parsec is also a unit of astronomical distance and is equal to approximately 3.26 light-years. Therefore, option (c) is correct.
18. **Explanation:** Jowar, bajra and ragi are the principal coarse cereals, also known as Shree Anna or nutri-cereals. They are rich in nutrients and are important crops even in regions receiving relatively low rainfall. Gram, pigeon pea and black gram are pulses, whereas cotton and sugarcane are cash crops. Therefore, option (b) is correct.
19. **Explanation:** The first wave of the Green Revolution was concentrated in well-irrigated regions. Punjab, Haryana, western Uttar Pradesh, coastal Andhra Pradesh and certain parts of Tamil Nadu were particularly associated with it. The Green Revolution was centred mainly on wheat and rice, and the initial increase in production was particularly pronounced in wheat. Its effects included foodgrain self-sufficiency, as well as problems such as regional inequality and a decline in the groundwater table. Therefore, option (b) is correct.
20. **Explanation:** India's geographical setting is extremely diverse. In terms of the distribution of its physiographic units, approximately 10.6 per cent of the area is occupied by high mountain ranges, 18.5 per cent by hills, 27.7 per cent by plateaus and 43.2 per cent by extensive plains. The plains are extremely important for India in terms of agriculture, population density and river systems. Therefore, the correct option regarding the area covered by extensive plains is (d).
21. **Explanation:** The Peninsular Plateau is composed of old crystalline igneous and metamorphic rocks. It is the

ancient landmass of India. Its principal divisions are the Central Highlands and the Deccan Plateau. Recent alluvial deposits are mainly associated with the Great Plains, whereas glacial deposits are associated with the Himalayan and high-latitude regions. Therefore, option (b) is correct regarding the structure of the Peninsular Plateau.

22. **Explanation:** India underwent a severe economic crisis during the 1960s. Successive monsoon failures, widespread drought, a decline in agricultural production and an acute shortage of foodgrains were its principal causes. The 1962 war with China and the 1965 India-Pakistan war increased military expenditure and placed pressure on the resources available for development activities. A decline in industrial production and exports, along with a reduction in foreign-exchange reserves, further aggravated the crisis. Against the background of the economic crisis, the rupee was devalued in 1966. The Fourth Five-Year Plan was postponed, and three Annual Plans were implemented during 1966–69. Therefore, option (a) is correct.
23. **Explanation:** During the 1980s, certain liberalisation measures relating to industrial licensing, import-export policy, technological upgradation and foreign investment were undertaken. Consequently, economic growth gained momentum. Compared with the average annual growth rate of approximately 3.5 per cent from the 1950s to the 1970s, the rate increased to approximately 5.65 per cent during the 1980s. Thus, the economy began to emerge from the period of the slow 'Hindu rate of growth'. However, the fiscal deficit, government borrowing, current-account deficit and external debt also increased during the same period. Since imports grew more rapidly than exports, pressure on the balance of payments continued to intensify. Therefore, option (b) is correct.
24. **Explanation:** In the First Five-Year Plan, agriculture, irrigation and power were accorded the highest priority, and special emphasis was also placed on community development. The Community Development Programme was launched on 2 October 1952 for rural development. Its objective was the comprehensive development of agriculture, health, education, skills, employment and rural life through public participation and self-help. In contrast, special emphasis on heavy and basic industries and capital goods was placed under the Mahalanobis strategy of the Second Five-Year Plan. Therefore, option (b) is correct.

25. **Explanation:** According to the Keynesian approach, the market does not always ensure full employment on its own. During a recession and in a situation of inadequate aggregate demand, the government can support demand through public investment, government expenditure and other fiscal measures. The socialist approach emphasises social justice, equality, equitable distribution of resources and social or public control over the principal means of production. The neo-liberal approach attaches importance to the private sector, privatisation, free trade, liberalisation and market-based reforms. The human development approach regards health, education, a decent standard of living and the expansion of human capabilities as the basis of development. Therefore, the correct matching is A-2, B-4, C-1 and D-3.

26. **Explanation:** Alauddin Khalji's original or real name was Ali Gurshasp. After ascending the throne, he assumed several titles, of which Sikandar-i-Sani was prominent. His coronation was held at Balban's Lal Mahal in Delhi in October 1296 CE. The Sultan who proclaimed himself the Caliph was Qutbuddin Mubarak Shah, not Alauddin Khalji. Therefore, Statement 4 is incorrect.
27. **Explanation:** Akbar's revenue minister, Todar Mal, played an important role in the field of land revenue. In the 24th year of his reign, Akbar introduced the Ain-i-Dahsala or Zabt system. Under this system, the average production of different crops during the preceding ten years and the average prevailing prices during the same period were calculated, and generally one-third of the average produce was collected as revenue. Therefore, option (b) is correct. This is an important fact relating to revenue administration.
28. **Explanation:** The Kakori Train Action took place on 9 August 1925. Bhagat Singh and Shivaram Rajguru killed Assistant Superintendent of Police J. P. Saunders in Lahore on 17 December 1928. On 8 April 1929, Bhagat Singh and Batukeshwar Dutt threw a bomb in the Central Legislative Assembly. Bhagat Singh, Sukhdev and Rajguru were hanged on 23 March 1931, not on 26 January 1930. Therefore, option (d) is incorrect.
29. **Explanation:** Kanishka was the most illustrious ruler of the Kushana dynasty. His first capital was Purushapura, i.e. Peshawar, and his second capital was Mathura. The Fourth Buddhist Council was held during his reign, and he was a follower of the Mahayana sect. Charaka was Kanishka's royal physician, whose major work was the 'Charaka Samhita'. Therefore, all four statements are correct.

- 30. Explanation:** The subjects dealt with in Ashoka's Major Rock Edicts are given here: the First Rock Edict prohibits animal sacrifice; the Fifth Rock Edict mentions the appointment of Dhamma Mahamattas; the Twelfth Rock Edict deals with the policy of religious tolerance; and the Thirteenth Rock Edict mentions the Kalinga War, neighbouring kings and the Atavika states. Therefore, option (d) is the correct answer.
- 31. Explanation:** Firoz Shah Tughlaq undertook several public welfare measures. He established a hospital called Dar-ul-Shifa or Shifakhana, set up a separate Public Works Department, and had two pillars of Ashoka brought from Topra and Meerut to Delhi and installed there. The Diwan-i-Riyasat was the department concerned with market control, which was established by Alauddin Khalji. Therefore, option (d) is the correct answer.
- 32. Explanation:** Mahavira Swami was the 24th and last Tirthankara of Jainism. He was born in 599 BCE at Kundagrama. His father, Siddhartha, was the chief of the Jnatraka clan, and his mother, Trishala, was the sister of the Licchavi king Chetaka. Mahavira renounced household life and became an ascetic at the age of 30 and, after 12 years of penance, attained Kaivalya (knowledge) under a sal tree on the bank of the Rijupalika River. Renunciation of household life at the age of 29 is associated with Gautama Buddha.
- 33. Explanation:** Elections to the Lok Sabha and the Legislative Assemblies of the States are held on the basis of adult suffrage. Its constitutional basis is Article 326. In the original Constitution, the age limit for voting was 21 years, which was reduced to 18 years by the 61st Constitution Act, 1988. The minimum age of a candidate for the Lok Sabha and Legislative Assembly is 25 years, whereas the minimum age prescribed for the Rajya Sabha and Legislative Council is 30 years.
- 34. Explanation:** The Directive Principles of State Policy are given in Articles 36 to 51 of Part IV of the Constitution. The concept underlying these principles was borrowed from the Constitution of Ireland. Their objective is to establish a welfare state and ensure socio-economic democracy. They are not enforceable in a court of law, that is, they cannot be directly enforced by a court. Nevertheless, they are regarded as fundamental in the governance of the country. The Directive Principles guide the legislature and the executive in policy formulation so that social justice, economic equality and public welfare may be promoted.
- 35. Explanation:** The Directive Principles of State Policy are given in Part IV of the Constitution. Article 38 relates to securing a social order for the promotion of the welfare of the people. Article 40 relates to the organisation of village Panchayats and endowing them with the powers and authority necessary to enable them to function as units of self-government. Article 44 relates to the endeavour of the State to secure a Uniform Civil Code for citizens. Article 50 relates to the separation of the judiciary from the executive in the public services of the State. Therefore, option (b) is correct.
- 36. Explanation:** The provision for the District Planning Committee is contained in Article 243ZD. It consolidates the plans prepared by the Panchayats and Municipalities and prepares a draft development plan for the district as a whole. At least four-fifths of the total number of its members are elected by and from among the elected members of the Panchayats at the district level and the Municipalities in the district. There is a separate provision for the Metropolitan Planning Committee, which is constituted under Article 243ZE for every metropolitan area.
- 37. Explanation:** The 74th Constitution Amendment Act, 1992 relates to urban local self-government. It came into force on 1 June 1993. Through this amendment, Part IXA was added to the Constitution, containing provisions relating to Municipalities in Articles 243P to 243ZG. It added the Twelfth Schedule, which contains 18 subjects relating to Municipalities. Under Article 243Q, provision was made for urban bodies such as Nagar Panchayats, Municipal Councils and Municipal Corporations.
- 38. Explanation:** In a series combination, there is only one path for electric current, and the same current flows through all the resistors. Therefore, their equivalent resistance is equal to the sum of the individual resistances, i.e. $R_s = R_1 + R_2 + R_3$. In a parallel combination, the resistances are not added directly; rather, the sum of their reciprocals is taken. Hence, the correct answer is option (a).
- 39. Explanation:** The German chemist J. W. Döbereiner formed groups of three elements having similar physical and chemical properties, which were called triads. When the elements of a triad were arranged in increasing order of atomic mass, the atomic mass of the middle element of the triad was approximately equal to the arithmetic mean of the atomic masses of the other two elements. This rule could be applied only to a few elements. Hence, option (a) is correct.
- 40. Explanation:** In the reactivity series, potassium, sodium, calcium, magnesium and aluminium are highly reactive metals; therefore, they are generally found in the form of compounds. Zinc, iron and lead are moderately reactive metals and are found mainly in the form of oxides, sulphides or carbonates. Gold, silver, platinum and copper are less reactive metals and may also be found in the free state. Hence, option (b) is correct.
- 41. Explanation:** The liver continuously produces bile, which is stored in the gallbladder. Bile is an alkaline, yellowish-green fluid. Bile does not contain any digestive enzyme; nevertheless, it is essential for the efficient digestion of fats. Bile salts physically disperse large fat globules into numerous small droplets. This process is called emulsification. Hence, option (c) is correct, whereas the other options are factually incorrect.
- 42. Explanation:** Ribonucleic acid is synthesised from deoxyribonucleic acid through transcription. Its molecules contain ribose sugar instead of deoxyribose and the nitrogenous base uracil instead of thymine. RNA involved in protein synthesis is mainly of three types—ribosomal RNA, messenger RNA and transfer RNA. Ribosomal ribonucleic acid is a component of ribosomes and assists in protein synthesis. Therefore, option (a) is correct.
- 43. Explanation:** According to Ohm's law, provided that there is no change in the physical condition of a conductor, the potential difference applied across the ends of the conductor is directly proportional to the electric current flowing through it. This relationship is expressed as $V = RI$, where R is resistance. The SI unit of resistance is the ohm. Some conductors obey Ohm's law and are called ohmic conductors; devices such as diodes and transistors may be non-ohmic. Electrical conductance is the reciprocal of resistance. Hence, option (a) is correct.
- 44. Explanation:** The stomach of ruminant animals such as cows, sheep and deer is divided into four chambers—rumen, reticulum, omasum and abomasum. These animals first swallow the food and store it in the rumen, where cellulose-digesting microorganisms are found. Later, the food is brought back into the mouth and chewed again. The abomasum is called the true stomach because its glands secrete hydrochloric acid and digestive enzymes.
- 45. Explanation:** Number of prime numbers in option (a)
23, 29, 31, 37 $\rightarrow$ 4 numbers
Number of prime numbers in option (b)
41, 43, 47, 53, 59 $\rightarrow$ 5 numbers

Number of prime numbers in option (c)
61, 67, 71, 73, 79 → 5 numbers
Number of prime numbers in option (d)
31, 37, 41, 43, 47 → 5 numbers
Hence, option (a) is the correct answer.

46. **Explanation:** $x + \frac{1}{x} = 4$

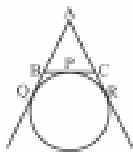
$$\therefore x^3 + \frac{1}{x^3} = (4)^3 - 3\left(x + \frac{1}{x}\right)$$

$$= 64 - 3 \times 4$$

$$= 64 - 12 = 52$$

47. **Explanation:**

$$\therefore AQ = AR = \frac{\text{Perimeter of } \triangle ABC}{2}$$



$$\therefore AQ = \frac{14 \times 1}{2} = 7.05$$

$$\therefore AQ = 7.05 \text{ cm.}$$

48. **Explanation:** In option (a) - 37254 (Divisible by 2, but not by 5, because the unit digit is neither 0 nor 5.)

In option (b) - 37915 (Divisible by 5, but not by 2, because the unit digit is neither zero (0) nor an even number.)

In option (c) - 20792 (Divisible by 2, but not by 5, because the unit digit is neither 0 nor 5.)

In option (d) - 63840 (It is divisible by both 2 and 5 because the unit digit is 0.)

49. **Explanation:** Given - Side of the cube (a) = 3

$$\frac{\text{Surface area of a Cube}}{\text{Volume of a Cube}} = \frac{6a^2}{a^3}$$

$$= \frac{6}{a} = \frac{6}{3} = 2 : 1$$

50. **Explanation:** Area of the sector

$$= \frac{\theta}{360^\circ} \times \pi \times r^2,$$

$$\text{Area of the triangle} = \frac{1}{2} \times r^2 \times \sin \theta$$

$$\text{Area of the segment} =$$

$$\text{Area of the sector} - \text{Area of the triangle}$$

$$= \frac{150^\circ}{360^\circ} \times \pi \times 12^2 - \frac{1}{2} \times (12)^2 \times \sin 150^\circ$$

$$= \frac{5}{12} \pi \times 12 \times 12 - 72 \times \frac{1}{2}$$

$$= (60\pi - 36) \text{ square cm.}$$

51. **Explanation:** According to Talcott Parsons, illness is not only an individual's biological condition; it also involves a social role known as the sick role. A sick person may be unable to fulfil normal social obligations fully. Therefore, society exempts the person from certain responsibilities according to the nature and severity of the illness.

In this way, the medical institution regulates the sick role and makes it treatment-oriented. Here, social control does not mean punishment; rather, it means limiting the social disruption caused by illness and helping the patient return to normal social roles. Therefore, in Parsons's model, the medical institution functions as a mechanism of social control and social reintegration.

52. **Explanation:** Albert Bandura's social cognitive theory is based on reciprocal determinism. This means that a person's behaviour is not determined only by the environment. Personal factors, behaviour and the environment influence one another. Personal factors include a person's thoughts, beliefs, expectations and self-efficacy. The environment influences a person's behaviour, but the person can also change the environment through his or her behaviour. Learning by observing others is known as observational learning. For example, a child may adopt similar health behaviours after observing family members exercising regularly, eating nutritious food or maintaining hygiene. Therefore, option (a), reciprocal determinism, is correct.

53. **Explanation:** The rural-urban continuum means that there is no rigid or absolute dividing line between a village and a town. A village is placed at one end of the continuum and a town at the other. In real life, villages are connected to towns through markets, employment, education, healthcare, administration, transport and communication. Similarly, towns depend on rural areas for food, raw materials, labour and other resources. Thus, the difference between rural and urban societies is neither complete nor absolute. It is mainly a difference in the degree and level of rural and urban characteristics. Therefore, option (b) is correct, which regards villages and towns as two connected ends of the rural-urban continuum.

54. **Explanation:** Francis Bacon explained the condition of a healthy and an unhealthy body through a powerful metaphor. According to him, a healthy body is a guest-chamber for the soul, in which it can live comfortably. In contrast, a sick body is a prison for the soul because illness restricts a person's activities and experiences. This statement means that good health facilitates human activity, thought and everyday life. Therefore, according to Bacon's statement, a healthy body is a guest-chamber for the soul, and option (a) is correct.

55. **Explanation:** Human beings live within a network of social relationships. Therefore, the social dimension indicates how effectively and in a

balanced manner a person can function within the family, group of friends, workplace and community. It includes building healthy relationships with others, cooperating, providing and receiving social support, fulfilling social roles and responsibilities, and participating in community activities. This dimension is not limited to physical examination, spiritual experience or occupational satisfaction. It is mainly concerned with a person's social functioning and connection with society. Therefore, option (b), an individual's ability to function as part of society, is correct.

56. **Explanation:** Merely constructing toilets is not sufficient to keep an area free from open defecation. Toilets must be used regularly and kept clean and functional. Water-flush toilets require water for flushing away faeces, personal cleansing, handwashing and regular toilet cleaning. If an adequate water supply is unavailable, regular toilet use may decline, and some people may return to open defecation. Here, "adequate water" does not mean an excessive quantity of water; it means the amount required according to the type of toilet technology being used. Therefore, the reliable availability of water is important for maintaining a status free from open defecation, and option (a) is correct.

57. **Explanation:** Research findings may differ from the actual situation for two major reasons—random error, which occurs by chance, and bias. Random error occurs by chance and can be reduced by increasing the sample size. Bias is systematic and consistently shifts the results of a study in an erroneous direction. Bias may persist even when the sample size is large. Therefore, it must be controlled through appropriate study design, blinding, standardisation and adherence to protocols.

58. **Explanation:** Standardisation is the process of establishing uniformity in research. Its purpose is to ensure that all interviewers and observers receive the same training and follow the same rules for asking questions, recording responses and taking measurements. It includes the use of the same questionnaire, same wording, order of questions, instructions and recording procedure. This reduces variation in the data arising from differences in interviewer behaviour, questioning style or judgement. Therefore, option (a) is correct.

59. **Explanation:** PEN-3 is a culture-centred health model. In its Cultural Empowerment dimension, health-related cultural beliefs and practices are classified into three categories—positive, negative and existential. Positive practices benefit health and

are therefore encouraged. Negative practices are harmful to health, so efforts are made to change them through culturally sensitive measures. Existential practices are unique to a particular community or culture but have no clearly beneficial or harmful effect on health.

60. **Explanation:** Ethnocentrism means regarding one's own culture, beliefs and behaviours as normal and superior and judging other cultures by the same standards. This approach is harmful in healthcare because it obstructs communication between the patient and the healthcare provider and may discourage the patient from seeking or continuing treatment. In contrast, cultural relativism attempts to understand a culture within its own socio-cultural context. Therefore, a possible effect of ethnocentrism is the creation of barriers to communication and trust, and the correct answer is (d).
61. **Explanation:** The Transtheoretical Model is also known as the Stages of Change Model. Associated with Prochaska and Diclemente, this model explains that behavioural change does not occur overnight but takes place through a series of stages. A person gradually adopts a new behaviour through stages such as precontemplation, contemplation, preparation, action, maintenance and, in some cases, termination. Relapse is also considered a normal part of this process.
62. **Explanation:** The Poverty Gap Index measures the depth of poverty. It indicates the average shortfall of people's income or consumption from the poverty line. For each poor person, the difference between the poverty line and his or her income or consumption is calculated and expressed as a proportion of the poverty line. For non-poor individuals, this gap is considered zero. The headcount ratio only indicates the percentage of people living below the poverty line. It does not indicate how far below the poverty line they are.
63. **Explanation:** The most common type of Down syndrome is complete trisomy 21. In this condition, each cell contains three separate copies of chromosome 21 instead of the usual two, resulting in a total of 47 chromosomes. Less common translocation and mosaic types also occur. A short neck, a flattened facial profile and generally mild to moderate cognitive and developmental difficulties are among its possible features. The 45, X is the typical monosomy of Turner syndrome, whereas 47,XXY is the common karyotype of Klinefelter syndrome. Therefore, option (c) is correct.

64. **Explanation:** The comparative approach in anthropology studies the similarities and differences among various societies and cultures. Understanding cultures in their historical and cultural contexts weakens the belief that one's own culture alone is superior or normal. Thus, context-sensitive comparison helps reduce ethnocentrism. Therefore, both A and R are true, and R is the correct explanation of A.
65. **Explanation:** The A, B, O blood group system is based on the presence or absence of A and B antigens on the surface of red blood cells. Red blood cells of blood group A carry A antigens, while the plasma contains anti-B antibodies. Red blood cells of blood group B carry B antigens, while the plasma contains anti-A antibodies. Blood group AB has both antigens but normally has neither anti-A nor anti-B antibodies. Blood group O has neither A nor B antigens, while the plasma contains both anti-A and anti-B antibodies. Therefore, option (d) is correct. A, B, O blood grouping is important in blood transfusion, blood-bank management, emergency medicine, and maternal and neonatal assessment.
66. **Explanation:** Leptospirosis is a zoonotic disease caused by pathogenic bacteria of the genus *Leptospira* and can affect both humans and animals. Human infection usually occurs through contact with water or soil contaminated by the urine of infected animals. The bacteria can enter the body through cuts or abrasions in the skin and through the mucous membranes of the eyes, nose and mouth. Mild cases may cause symptoms such as fever, headache, chills and muscle pain. A characteristic severe form accompanied by jaundice is known as Weil's disease, in which the liver and kidneys are severely affected. Bleeding may also occur in severe cases. Therefore, option (c) is correct.
67. **Explanation:** The infant mortality rate represents the number of infant deaths occurring before the completion of one year of age per 1,000 live births during a specified year or period. Its denominator is live births, and its age range extends from birth to less than one year. It is a sensitive indicator of infant survival and the health and living conditions of a community. It does not include maternal deaths or deaths in all age groups. Therefore, option (b) is correct.
68. **Explanation:** The M and N antigens are part of the broader MNS blood group system and are genetically determined. Their importance in blood transfusion is lower than that of the A, B, O and Rh systems.

Naturally occurring anti-M and anti-N antibodies are generally clinically insignificant; therefore, they usually do not cause acute severe transfusion reactions such as those caused by ABO incompatibility. However, some anti-M antibodies that are active at 37°C, as well as anti-S, anti-s and anti-U antibodies of the broader MNS system, may be clinically significant. The MN system is useful in genetics, population studies and anthropology. It has also had a historical and limited role in forensic serology. Therefore, option (b) is correct.

69. **Explanation:** Participant observation is a major method of anthropological fieldwork. In this method, the researcher participates, as far as possible, in the daily life of a community while systematically observing its behaviour, relationships, division of labour and social interactions. This helps in understanding behaviour within its local and socio-cultural context. The method is not limited to observation from a distance, questionnaires or laboratory investigations. Therefore, option (a) is correct.
70. **Explanation:** Acute respiratory infections can be an important cause of illness and death among children under five years of age. Soil-transmitted helminths spread through soil contaminated with human faeces in areas with poor sanitation. Leprosy is a chronic infectious disease caused mainly by *Mycobacterium leprae* and can be cured with multidrug therapy. It mainly affects the skin, peripheral nerves, the mucosa of the upper respiratory tract and the eyes; it is not only confined to the bones. Therefore, statements 1, 2 and 3 are correct, while statement 4 is incorrect. Hence, option (b) is correct.
71. **Explanation:** Muscular dystrophy refers to a group of genetic disorders characterised by progressive muscle weakness and wasting. Duchenne and Becker muscular dystrophies follow an X-linked recessive pattern of inheritance. For this reason, they mainly occur in boys and men, although some female carriers may also show symptoms. Muscular dystrophy is not an infectious or food-borne disease, nor is it caused solely by haemoglobin deficiency. Therefore, option (a) is correct.
72. **Explanation:** Human diversity can broadly be understood in terms of biological and socio-cultural dimensions. The biological dimension includes physical build, skin colour, genetic characteristics and environmental adaptations. The socio-cultural dimension includes language, religion, caste, tribe, family, marriage,

dietary habits, livelihoods, education and health-related beliefs. These two dimensions are interconnected. Biological, environmental and socio-cultural factors jointly influence outcomes such as susceptibility to disease and nutritional status. Therefore, option (c) is correct.

73. **Explanation:** Social and mental health indicators assess the social conditions, psychosocial risks and mental health outcomes associated with the well-being of individuals and communities. Literacy, poverty, unemployment and gender inequality are major social indicators. Stress, the suicide mortality rate, harmful substance use and domestic violence are indicators related to mental and psychosocial health. Red blood cell count is a biomedical indicator; immunisation and hospital beds are healthcare indicators; and temperature and rainfall are environmental indicators. Therefore, option (d) is correct.
74. **Explanation:** Public health is not limited to medical science. Health and disease are influenced by biological, social, environmental and behavioural factors. Therefore, many disciplines contribute to public health, including the social and behavioural sciences, epidemiology, demography, nutrition, sanitation, health education, health management and biostatistics. The government, local bodies, health workers, voluntary organisations and the community also participate in public health efforts. Therefore, option (a) is correct.
75. **Explanation:** Howard Gardner did not regard intelligence as a single general ability or only an intelligence quotient (IQ) score. According to him, intelligence may take various forms, such as linguistic, logical-mathematical, musical, bodily-kinaesthetic, spatial, intrapersonal, interpersonal and naturalistic intelligence, and possibly existential intelligence. This approach shows that one person may excel in language, while another may excel in music, sport, social relationships or the understanding of nature. It also explains the rationale for using different presentation methods in health education.
76. **Explanation:** Ivan P. Pavlov was a physiologist studying digestion in dogs. He observed that the dogs began to salivate not only when they were given food but also when they saw the dishes from which they were fed. This observation prompted him to experiment with the association between stimuli. Later, by pairing a bell with food, he formulated the theory of classical conditioning. The cat experiment is associated with Thorndike.

77. **Explanation:** A favourable environment promotes the development of a child's physical, mental, emotional and social abilities. Good nutrition, a safe home, loving relationships, quality education, healthcare services and opportunities for learning enhance the prospects for growth and development. In contrast, malnutrition, violence, neglect, poverty, illness, a stressful family environment and lack of education may hinder development. Thus, option (c) presents the conditions that provide positive opportunities for innate abilities to develop. Therefore, when explaining an individual's development or response, the biological basis, previous experiences and present circumstances must all be considered.
78. **Explanation:** Low immunisation coverage cannot be attributed solely to inadequate service availability. People may face barriers such as fear of side effects, rumours, religious or social beliefs, family pressure, distrust of health workers and misconceptions about the disease. Psychological assessment helps identify these actual barriers. Appropriate messages, counselling, community dialogue and behaviour-change strategies can then be developed. Blaming the community or conducting unrelated intelligence tests is not a scientific solution to the problem. Therefore, it is necessary to understand not only observable behaviour but also the individual's ability, motivation, language, circumstances and individual differences in personality.
79. **Explanation:** The purpose of explaining behaviour is to clarify why a person behaves in a particular way and why a particular measurement or intervention is used. Psychologists develop theories to organise known facts and draw logical inferences. Unless the causes of behaviour are clearly understood, it is difficult to predict it accurately or guide it in a positive direction. Therefore, explanation is regarded as the ultimate and highly important goal of psychology. It is based not on personal opinion but on scientific facts and theories.
80. **Explanation:** William James referred to long-term memory as "secondary memory." In secondary memory, information remains stored for a long time even when it is outside immediate consciousness and can be retrieved when required. A person may remember childhood events, language, habits and knowledge acquired many years earlier. Compared with primary or immediate memory, secondary memory is considered more permanent. Echoic memory is auditory sensory memory, whereas "Operant Memory" is not the concept used here.

81. **Explanation:** The National Programme for Health Care of the Elderly was launched in 2010, during the Eleventh Five-Year Plan, to address the health-related problems of older persons. Under the programme, services below the district level are to be integrated into the existing primary healthcare system, while more specialised services are provided at the district level and above. District Hospitals, Community Health Centres, Primary Health Centres and Health and Wellness Centres may be involved in service delivery. Therefore, option (d) is correct.
82. **Explanation:** Maslow arranged human needs in a hierarchical order. Physiological needs, such as food and water, are placed at the base. These are followed by safety needs, love and belongingness needs, esteem needs and, at the highest level, the need for self-actualisation. Therefore, option (c) presents the correct sequence. Thus, it is necessary to understand not only observable behaviour but also the individual's ability, motivation, language, circumstances and individual differences in personality.
83. **Explanation:** In naturalistic observation, the behaviour of an individual or group is observed in its real-life environment, such as the home, school, hospital or community. In contrast, controlled observation involves studying behaviour under controlled conditions, usually in a laboratory or another controlled setting. The observer's participation in the group is a feature of participant observation, not controlled observation. Therefore, option (c) is correct, while the other options mix the characteristics of different types of observation.
84. **Explanation:** According to the Gestalt approach, the mind tends to perceive stimuli not as scattered parts but as an organised whole. Perceiving a table as a complete object rather than perceiving its legs, surface and other parts separately demonstrates the holistic nature of perception. This principle explains that the whole experience is more organised than the mere sum of its parts. Therefore, option (c) provides the correct explanation.
85. **Explanation:** As a natural science, psychology studies the brain, nervous system, hormones, biochemical processes and physiological functions. At the same time, as a social science, it examines the family, community, culture, social beliefs, public opinion and group behaviour. Human behaviour is influenced by both biological and social factors; therefore, psychology is called a hybrid science. It uses the scientific method, observation, experimentation and data analysis; hence, option (b) is also incorrect.

- 86. Explanation:** Before language develops, crying, babbling and gestures are forms of pre-linguistic communication. Crying is a newborn's first sound, while babbling is regarded as an early indication of human speech. At approximately 18–24 months of age, children begin to use two words together. In explaining language acquisition, behaviourists emphasise imitation, association, reinforcement and shaping, whereas Chomsky proposed an innate readiness to learn grammar and the concept of universal grammar. Therefore, all four statements are correct.
- 87. Explanation:** Effective communication promotes team building, trust, self-expression and organisational engagement. Open communication encourages innovation and creative ideas. Communication networks enable the early identification of shortcomings and make corrective action possible, while also improving coordination between management and lower organisational levels. Therefore, preventing new strategies is not a benefit; rather, it is contrary to effective communication. Hence, option (c) is the correct answer. The success of communication is determined not merely by sending a message but by whether the intended meaning is understood, an appropriate medium is used and feedback is received.
- 88. Explanation:** Specificity is important in the relationship between attitude and behaviour. A person may like sports in general but dislike boxing. Therefore, a broad or general attitude does not accurately predict a specific behaviour. The more closely an attitude and behaviour relate to the same specific subject, the more useful the prediction is likely to be. Hence, option (c) is the correct answer.
- 89. Explanation:** Through social suggestion, society encourages proper conduct by presenting examples from the lives of great leaders, eminent personalities and ideal individuals. The installation of statues, dissemination of biographies and oral or written advice are its means. Social ideals serve as standards of behaviour, and a national ideal such as "Unity in Diversity" promotes harmony among diverse communities. Hence, option (b) is the correct answer.
- 90. Explanation:** At the individual level, people may hold different values, but at the collective level, values such as truth, respect, justice, cooperation and compassion bind society together. Because of this unifying role, values are called "Social Glue." This does not mean that all individuals must have exactly the same views or that change must cease. Values provide a shared moral foundation amid diversity, making social cooperation and stability possible. Therefore, option (b), which refers to binding society together, is the correct answer.
- 91. Explanation:** Successes and failures in life, experiences of injustice and another person's selfless help may challenge or strengthen existing beliefs. Films, books and social media can influence collective values by promoting new lifestyles and ideas. Religious scriptures and spiritual teachings provide a framework for moral living and foster values such as compassion, forgiveness and altruism.
- 92. Explanation:** Lasswell explained the communication process through five questions: "Who says what, in which channel, to whom and with what effect" These five questions respectively represent the communicator or source, the message, the medium or channel, the receiver or audience, and the effect or outcome of communication. Therefore, option (b) is correct. The other options either omit an essential stage of the process or incorrectly associate the relevant theory with another concept.
- 93. Explanation:** Yoga is described not merely as physical or mental exercise but as a philosophy of life. Avidya, meaning ignorance or lack of awareness, is regarded as the root cause of suffering and disease. An unhealthy lifestyle, as well as a person's beliefs and values, can contribute to physical, mental and social problems. Yoga seeks to develop a balanced way of life by increasing awareness. Hence, option (d) is the correct answer.
- 94. Explanation:** Diet is directly related to health. A high-fat diet may increase the risk of heart disease, while malnutrition increases susceptibility to infection. The external environment—air, water, housing and sanitation—affects many diseases. Socio-economic status determines access to food, housing and healthcare services; tuberculosis and leprosy may be more common among people living in poverty. Access to immunisation, treatment and preventive services reduces mortality and increases life expectancy. Hence, option (b) is the correct answer.
- 95. Explanation:** Gurvitch and Moore discussed organised, unorganised and automatic social control. Organised social control involves clearly defined rules and agencies. Unorganised social control operates informally through folkways, customs and traditions. Automatic social control arises from an individual's inner motivation and religious beliefs, in which the individual voluntarily follows values. Hence, option (c) is the correct answer.
- 96. Explanation:** An explicit attitude is one that a person consciously recognises and can express, such as a preference for a particular brand. It is relatively under conscious control. An implicit attitude operates automatically outside conscious awareness, and the person may not always realise that it is influencing their behaviour. Hence, option (c) is the correct answer.
- 97. Explanation:** If everyone were to disobey traffic signals or disregard social rules at will, uncertainty and disorder would increase within social organisation. Social control directs behaviour in the expected manner and provides social organisation with stability and certainty. It also helps transmit culture and heritage from one generation to the next, establish coordination among groups and restrain harmful forces to protect others. Hence, option (d) is the correct answer.
- 98. Explanation:** Social psychology is the branch of psychology that scientifically studies how the actual, imagined, or implied presence of other people influences an individual's thoughts, feelings, and behaviour. Direct face-to-face presence is not essential; a person may also be influenced by social expectations, the imagined presence of a group, or implicit norms. Thus, its field concerns neither biological development nor economic institutions, and it is not confined merely to the analysis of dreams. Therefore, option (d) is the correct answer.
- 99. Explanation:** According to Article 168, there shall be a Legislature in every State. In a unicameral State, the Legislature consists of the Governor and the Legislative Assembly. In a bicameral State, it consists of the Governor, the Legislative Assembly, and the Legislative Council. The Legislative Assembly is the directly elected lower House, as its members are chosen directly by the people. The Legislative Council is the upper and permanent House. Like the President, the Governor is not a member of any House of the Legislature; nevertheless, the Governor is a constitutional component of the State Legislature.
- 100. Explanation:** According to Article 243F, a person shall not be disqualified from becoming a member of a Panchayat solely on the ground that he has not attained the age of 25 years, provided that he has attained the age of 21 years. Therefore, the minimum age for membership of a Panchayat is 21 years. This provision differs from the minimum age of 25 years prescribed for membership of the Lok Sabha and State Legislative Assemblies. This lower age limit has been prescribed to encourage the participation of relatively young citizens in local governance.

- 101. Explanation:** Article 32 grants the right to approach the Supreme Court directly for the enforcement of Fundamental Rights. Dr. B. R. Ambedkar described it as the “heart and soul” of the Constitution. Under Article 226, a High Court may issue writs for the enforcement of Fundamental Rights as well as other legal rights. Therefore, the writ jurisdiction of a High Court is wider in terms of subject matter. However, Article 32 is itself a Fundamental Right, whereas Article 226 confers constitutional power on the High Courts.
- 102. Explanation:** According to Article 56, the President holds office for five years from the date on which he enters upon his office. He may resign by addressing his resignation to the Vice-President. According to Article 57, the President is eligible for re-election, and the Constitution does not prescribe any limit on the number of times he may be re-elected. Even after completing his term, he may continue in office until his successor assumes office. The President’s continuance in office does not depend on the confidence of the Lok Sabha; he can be removed only through the constitutional process of impeachment.
- 103. Explanation:** According to Article 12, the term “State” includes the Government and Parliament of India, the Government and Legislature of each State, and all local or other authorities within the territory of India or under the control of the Government of India. An Ordinary, wholly private body over which the government does not exercise deep and pervasive, financial, functions and administrative control is not, by itself, considered a ‘state’ under Article 12 of the constitution. Only statutory or regulatory control is not sufficient to bring such an institution within the definition of ‘state’ under Article 12.
- 104. Explanation:** Article 213 empowers the Governor to promulgate an Ordinance when the Legislative Assembly is not in session or, in a bicameral State, when both Houses are not simultaneously in session and immediate action is necessary. Such an Ordinance has the effect of a temporary law. The Governor ordinarily acts on the advice of the Council of Ministers but may exercise limited constitutional discretion in situations such as appointing a Chief Minister in a hung Assembly, allowing the Chief Minister to prove a majority, considering a recommendation to dissolve the Assembly made by a government that has lost its majority, and sending a report recommending President’s Rule. Whether a government has a majority is not decided personally by the Governor; it is tested on the floor of the Assembly.
- 105. Explanation:** The protection of monuments, places, and objects of national importance is provided under Article 49 as a Directive Principle of State Policy. In contrast, protecting and improving the natural environment, developing scientific temper and humanism, and safeguarding public property are included among the Fundamental Duties under Article 51A. This distinction is important for examination purposes because environmental protection is also a Fundamental Duty of citizens, whereas the protection of monuments is primarily a constitutional directive addressed to the State.
- 106. Explanation:** The Election Commission of India is a permanent constitutional body established under Article 324 of the Constitution. It was constituted on 25 January 1950. The Commission is vested with the superintendence, direction and control of the preparation of electoral rolls for, and the conduct of, elections to Parliament, State Legislatures, and the offices of the President and Vice-President. Its objective is to ensure free and fair elections. Elections to Panchayats and Municipalities are conducted not by the Election Commission of India but by the respective State Election Commissions.
- 107. Explanation:** According to Article 224(1), if there is a temporary increase in the business of a High Court or arrears of work, the President may appoint a duly qualified person as an additional Judge for a period not exceeding two years. An acting Judge may also be appointed when a permanent Judge is temporarily absent. No additional or acting Judge may hold office after attaining the age of 62 years.
- 108. Explanation:** According to Article 358, the rights under Article 19 are automatically suspended only during a National Emergency proclaimed on the grounds of war or external aggression. Such automatic suspension does not apply to an Emergency proclaimed on the ground of armed rebellion. Under Article 359, the President may suspend the right to move a court for the enforcement of certain Fundamental Rights, but the enforcement of the rights under Articles 20 and 21 cannot be suspended. However, after the 44th Constitutional Amendment, the protection under Article 358 is available only to a law containing an express statement that it relates to the Proclamation of Emergency, and only executive action taken under such a law is protected.
- 109. Explanation:** Article 174 deals with the sessions, prorogation, and dissolution of the State Legislature. According to Article 174(1), the Governor summons the House or, in a bicameral State, each House from time to time; however, no more than six months may elapse between the last sitting of one session and the first sitting of the next session. Therefore, in practice, the Legislature must meet at least twice a year. The Governor may prorogue a House and dissolve the Legislative Assembly. The Legislative Council, being a permanent House, is not subject to dissolution. Therefore, option (b) is the correct answer.
- 110. Explanation:** Article 243C deals with the composition of Panchayats and empowers the State Legislature to make laws regarding their composition. Article 243D provides for the reservation of seats in Panchayats. Under this provision, seats are reserved for the Scheduled Castes and Scheduled Tribes in proportion to their respective populations.
- 111. Explanation:** Economic status determines whether a person can obtain nutritious food, safe housing, clean water, transport, diagnostic tests, and treatment. Poverty, income, employment, occupation, economic inequality, and expenditure on healthcare affect both the likelihood of disease and the ability to obtain treatment. A poor person may delay treatment because of the cost of consulting a doctor, medicines, diagnostic tests, travel, and loss of wages. Rainfall and altitude are physical factors; culture and gender are social factors; and air and water pollution are environmental factors. Therefore, option (d) represents the correct group of economic determinants.
- 112. Explanation:** India has a mixed healthcare system. Government institutions, private hospitals, non-governmental organisations, community-based services, and traditional systems of medicine operate alongside one another. Healthcare services are not limited to hospitals and doctors; they also include prevention, treatment, rehabilitation, nutrition, immunisation, maternal and child health, digital health, and health education. A mixed system offers wider access but also creates challenges relating to quality, regulation, financial protection, and rural-urban inequality. Therefore, it is not correct to regard it as a system based on only one sector. Community participation, clear information about available services, and a strong referral mechanism are important for the effectiveness of health programmes.

- 113. Explanation:** Food availability depends on local production, irrigation, soil quality, roads, markets, and storage facilities. Better irrigation and fertile soil can increase production, while roads and markets support food distribution and farmers' incomes. Proper storage reduces crop losses. In contrast, water scarcity and rain-dependent agriculture in semi-arid regions such as Bundelkhand may increase food insecurity. Food security does not depend solely on imports or a single crop; it depends on production, distribution, and a diversity of food sources working together. Improving nutrition requires coordinated action involving nutritious food, sanitation, infection control, and social security.
- 114. Explanation:** The objective of the National Rural Health Mission is to strengthen primary healthcare services in rural areas, particularly in poor, remote, tribal, and backward regions. The Mission developed the role of the Accredited Social Health Activist (ASHA) as a link between the community and the healthcare system. ASHAs carry messages on maternal and newborn health, immunisation, nutrition, family planning, and disease surveillance from door to door. A Health Education Officer should coordinate with ASHAs, Auxiliary Nurse Midwives, and Anganwadi workers to make local health education and referral services effective.
- 115. Explanation:** Floods not only increase the incidence of diseases but also disrupt the healthcare delivery system. When roads are submerged or damaged, access to Primary Health Centres and Community Health Centres may be cut off. The supply of medicines, vaccines, and essential materials may be interrupted. Immunisation sessions may be suspended, and pregnant women may face difficulty in accessing childbirth services. Disruptions in electricity and communication may also delay referrals. Therefore, flood preparedness requires alternative routes, medicine stockpiles, mobile health services, ambulances, safe childbirth plans, and continuity of immunisation services.
- 116. Explanation:** The stability of food security means that food availability, access, and utilisation must be maintained not only at a particular point in time but throughout the year and during crises. Droughts, floods, pandemics, inflation, unemployment, and migration can destabilise food security. Therefore, storage, disaster preparedness, public distribution, social security, and continuity of nutrition services are essential. If food is available for only a few months but is unavailable during the lean season (seasonal period of scarcity), food security is not stable. This pillar focuses on continuity over time and resilience during crises, not on the colour of food or its availability on a single day.
- 117. Explanation:** Duchenne Muscular Dystrophy is an X-linked genetic disorder that primarily affects boys. It causes progressive muscle weakness. An affected child may fall frequently, have difficulty walking, and later develop respiratory and cardiac complications. It is neither a skin infection nor a waterborne disease. Its progressive nature distinguishes it from ordinary temporary weakness. Correctly identifying the category of the disease helps in selecting appropriate strategies for screening, prevention, treatment, and counselling.
- 118. Explanation:** Japanese encephalitis is a viral disease transmitted by Culex mosquitoes, whereas Acute Encephalitis Syndrome (AES) is a broad clinical syndrome that may have several causes. Eastern Uttar Pradesh, Bihar, Assam, and some parts of north-eastern India have been significantly affected, although Japanese encephalitis is more widely distributed across India. The transmission of Japanese encephalitis is associated with paddy fields, stagnant water, irrigation channels, the breeding of Culex mosquitoes, pig rearing near human settlements, and the monsoon and post-monsoon seasons. Pigs act as amplifying hosts for the virus, and humans become infected through the bite of an infected mosquito. The Gorakhpur-Basti region has historically faced a major challenge from AES and Japanese encephalitis, but not all cases of AES are caused by Japanese encephalitis.
- 119. Explanation:** Floods may contaminate drinking-water sources, disrupt sanitation systems, and increase waterlogging. This raises the risk of diarrhoea, cholera, typhoid, and other waterborne diseases. Prolonged contact with contaminated water may cause skin diseases, while the movement of snakes and other animals into human settlements may increase cases of snakebite. Vector-borne diseases may also increase because of mosquito breeding. Therefore, important preparedness measures include adequate stocks of oral rehydration solution (ORS) and anti-snake venom, water chlorination, the provision of safe drinking water, handwashing, and the cleaning of water sources. For this reason, an accurate assessment of regional risks makes health education and resource allocation more effective.
- 120. Explanation:** In India, the Disaster Management Act, 2005 is the principal legal basis for disaster management. It provides for the establishment of the National Disaster Management Authority and creates an institutional framework for disaster risk reduction, preparedness, response, and rehabilitation. Under this framework, the National Disaster Management Plan covers risk reduction, mitigation, preparedness, response, recovery, and rehabilitation. The other options relate to health, food security, or immunisation policies and are therefore not the principal legal basis for disaster management. Advance planning and the protection of vulnerable groups are essential for reducing mortality and the burden of disease during disasters.
- 121. Explanation:** Health geography is an interdisciplinary field that links human geography with public health. It examines how the climate, water, soil, housing, population density, poverty, education, nutrition, sanitation, availability of health services and socio-cultural practices in a place are related to health outcomes. Its purpose is not merely to describe the spatial distribution of a disease, but also to understand why it is more prevalent in a particular region, community or social group. Therefore, it is described as the study of the interrelationships among place, environment, society and health.
- 122. Explanation:** The spread and risk of tuberculosis may be greater in communities where poverty, overcrowding, malnutrition and poor ventilation are common. Smoking and diabetes can increase the risk, while limited access to health services can delay diagnosis and treatment. Special surveillance may be required in urban slums and among migrant workers and industrial workers. Tall stature and long fingers may be signs of Marfan syndrome, while an extra X chromosome is associated with Klinefelter syndrome. Good nutrition and ventilation can help reduce the risk of tuberculosis.
- 123. Explanation:** Mitigation measures should be disaster-specific. Embankments, drainage systems and floodplain zoning are useful for floods. In earthquake-prone areas, earthquake-resistant building codes reduce the risk of structural damage. For heatwaves, a Heat Action Plan provides a framework for early warning, drinking water, shaded spaces and health response. In landslide-prone areas, slope stabilisation and afforestation help strengthen the soil and slopes. Therefore, the correct matching is A-3, B-4, C-2 and D-1. A single mitigation measure is not equally suitable for all

disasters. Advance preparedness and the protection of vulnerable groups are essential in disaster management to reduce deaths and the burden of disease.

124. **Explanation:** The objective of the National Urban Health Mission is to connect the urban poor, slum residents, migrant workers and other vulnerable urban groups with primary healthcare services. Cities face diverse challenges such as overcrowding, pollution, informal settlements, temporary employment, waste, tuberculosis, dengue, diabetes, hypertension and mental stress. Even when hospitals are nearby, actual access may remain limited because of insufficient information, high costs, inadequate outreach and weak referral systems. Therefore, the Mission emphasises community outreach, primary healthcare services and referral services.
125. **Explanation:** In India, the prevalence of human immunodeficiency virus infection may be relatively low among the general adult population, but the burden of infection may be higher among certain high-risk groups. These may include female sex workers, men who have sex with men, people who inject drugs, transgender communities and migrant or mobile populations. Safe sexual practices, condom use, testing, sterile needles, treatment and stigma-free counselling are essential. Rather than blaming high-risk groups, respectful and confidential access to services should form the basis of health education. Regional disease mapping can help direct limited resources on a priority basis to high-risk locations and groups.
126. **Explanation:** The Poona Sarvajanik Sabha was established on 2 April 1870. Ganesh Vasudev Joshi, S. H. Sathe and S. H. Chiplunkar were its prominent early organisers. Later, Mahadev Govind Ranade became its leading mentor. In 1875, the organisation sent a petition to the House of Commons demanding direct representation for Indians in the British Parliament. This organisation played an important role in advancing constitutional methods of political action and the demand for representation.
127. **Explanation:** The Kol Rebellion took place in the Chotanagpur region in 1831–32 AD. Its main cause was the growing interference of outsiders, known as dikus. Encroachment on land rights by the dikus, exploitation by moneylenders and contractors, and police and judicial repression led to the rebellion. Buddhu Bhagat was its principal leader. Local Manki-Munda leaders such as Bindrai Manki, Singrai Manki and Sui Munda were also associated with the movement. This rebellion was directed against colonial and socio-economic exploitation.
128. **Explanation:** The Sarnath Lion Capital is regarded as one of the finest works of Mauryan sculpture. It has four lions standing back to back, which are considered symbols of power, Dhamma and imperial sovereignty. The original Lion Capital includes a bell-shaped lotus, while its circular abacus bears figures of an elephant, a horse, a bull and a lion. Dharma Chakras are carved between these animal figures. India adopted an adaptation of this Lion Capital as the State Emblem of India.
129. **Explanation:** The Revolt of 1857 failed for several reasons. The rebels lacked a central leadership with an all-India reach. Mughal emperor Bahadur Shah Zafar was their symbolic leader, but he was old and politically weak. Coordination among centres such as Delhi, Kanpur, Awadh, Jhansi and Bihar was limited. The British possessed modern rifles, artillery, railways, postal services and the telegraph. Several Indian rulers also supported the British.
130. **Explanation:** Kesaria Stupa is located in the East Champaran district of Bihar. It is regarded as one of the tallest and largest Buddhist stupas in India. The Chinese traveller Hiuen Tsang mentioned this stupa in his travel account. Images of the Buddha in the Bhumisparsha Mudra and the Padmasana posture have been found here. This shows that the site is extremely important for the study of Buddhist tradition, memory and sculptural art.
131. **Explanation:** The factory system was the most significant organisational change of the Industrial Revolution. Under this system, production moved out of homes and small workshops and became concentrated in large factories. Production began to take place at a single location with the help of large machines and organised labour. This led to the development of the division of labour, work specialisation and a time-bound production system. The factory owner controlled the raw materials, machines, building and finished products, while workers sold their labour power in return for wages.
132. **Explanation:** Gandhiji wrote Hind Swaraj in Gujarati between 13 and 22 November while returning from London to South Africa aboard the S.S. Kildonan Castle. In this work, he criticised modern Western civilisation and presented an outline of Swaraj, Swadeshi, soul-force and moral politics. It was in South Africa that Gandhiji developed the methods of Satyagraha, community living, non-violence and moral resistance. The Phoenix Settlement and Tolstoy Farm also became centres of Gandhian experiments. Therefore, Hind Swaraj is an important work in the ideological development of Gandhiji.
133. **Explanation:** Temple architecture is an important source for the study of Indian art, religion and society. Temple images, sculptures, inscriptions, donation records and architectural plans provide information about the religious beliefs and social structure of the period. Temples also provide knowledge about royal patronage, regional styles, urban life and the development of craftsmanship. Over time, temples became not only places of worship but also social, economic and administrative institutions.
134. **Explanation:** The Samaveda is considered the father of Indian music because the hymns of the Rigveda were arranged in it in a musical form. During yajnas, it was used by the Udgata priest for melodic singing. Rhythm, musical notes and singing have special importance in the Samaveda. Its mantras were not recited in the ordinary manner; instead, they were sung as Samagana. For this reason, it is regarded as an extremely important Veda from both religious and musical perspectives.
135. **Explanation:** Germany invaded Poland on 1 September 1939. Following this, Britain and France declared war on Germany on 3 September 1939. On 22 June 1941, Germany invaded the Soviet Union under Operation Barbarossa. On 7 December 1941, Japan attacked Pearl Harbor, after which the United States entered the war. On 6 June 1944, the second front was opened in Normandy, which placed decisive pressure on Germany.
136. **Explanation:** Among the royal buildings of the Mauryan period, the palace at Pataliputra was particularly famous. This vast palace of Chandragupta Maurya was built of wood, and its magnificence was also described by Greek writers. This shows that wooden architecture had reached an advanced stage during the Mauryan period. The later use of stone gave Mauryan architecture greater permanence and grandeur. Therefore, option (b) is correct.
137. **Explanation:** The Second World War was the most destructive war in modern history. After the war, the United Nations was established to maintain world peace. The war weakened the European imperial powers economically and politically, which gave momentum to national liberation movements in Asia and Africa. The United States and the Soviet Union emerged as two superpowers, and an ideological, political and strategic conflict began between them, which came to be known as the Cold War. Therefore, all three outcomes are correct.

- 138. Explanation:** The Partition of Bengal came into effect on 16 October 1905. Viceroy Lord Curzon cited administrative convenience as the reason for the partition because Bengal at that time also included Bihar and Orissa. The nationalists regarded it as a policy intended to break Bengali unity and weaken the emerging nationalist movement. On the day the partition took effect, Bengal observed mourning and fasting in protest. At the call of Rabindranath Tagore, people tied rakhis to symbolise Hindu-Muslim unity.
- 139. Explanation:** The States Department was established to give an organised form to the integration of the princely states. Sardar Vallabhbhai Patel was in charge of the Department, and V. P. Menon was its Secretary. Patel was the first Deputy Prime Minister and Home Minister of independent India. V. P. Menon played an important role at the administrative and diplomatic levels in reaching practical agreements with the rulers of the princely states. Patel's policy maintained a balance among national interest, practical incentives and firm action wherever necessary.
- 140. Explanation:** The Bombay Session of 1885 was the first session of the Congress. It was attended by 72 delegates, and Womesh Chandra Bonnerjee became its President. At the Madras Session of 1887, Badruddin Tyabji became the first Muslim President of the Congress. The Belgaum Session of 1924 is particularly significant because it was the only Congress session presided over by Gandhiji. Therefore, all three statements are correct, and option (d) is the appropriate answer.
- 141. Explanation:** The announced dates were 12 February 2026 for the new series of the Consumer Price Index, 27 February 2026 for the new series of Gross Domestic Product and 28 May 2026 for the new series of the Index of Industrial Production, respectively. Therefore, the correct chronological order is the Consumer Price Index, Gross Domestic Product and the Index of Industrial Production.
- 142. Explanation:** Under relative poverty, the position of an individual or group is assessed in comparison with the income, wealth and standard of living of other sections of society. It therefore highlights income distribution and social inequality. A person may be above the minimum standard of living but may still be considered relatively poor if they are far behind the average-income or high-income groups of society. Absolute poverty is based on a specified poverty line, whereas relative poverty focuses on distributional disparities. The two concepts explain different aspects of poverty.
- 143. Explanation:** The Gini coefficient is a mathematical measure of inequality in income distribution, and its value ranges from zero to one. Zero represents perfect equality, meaning that everyone receives an equal income. One represents complete inequality, meaning that the entire income is concentrated in the hands of one person or a very small group. The Gini coefficients of real-world economies lie between these two extremes. The Lorenz curve presents inequality graphically, while the Gini coefficient expresses the same degree of inequality as a numerical value.
- 144. Explanation:** For 2023, India's female Human Development Index value was 0.631, while its male Human Development Index value was 0.722. The lower female value reflects gender differences in achievements related to health, education and income. The ratio of the female Human Development Index value to the male Human Development Index value gives the Gender Development Index, which was 0.874 for India. The value 0.685 was India's overall Human Development Index value. The value 0.403 was related to the Gender Inequality Index, while 0.874 was related to the Gender Development Index.
- 145. Explanation:** Cyclical unemployment arises during the recession or depression phase of the business cycle. When aggregate demand for goods and services falls, producers reduce production, and the need for workers decreases. This results in layoffs or a reduction in employment. This type of unemployment is not caused by a mismatch of skills or seasonal factors; rather, it is associated with fluctuations in overall economic activity. Cyclical unemployment may decline when demand and production in the economy improve.
- 146. Explanation:** The main message of the report is that artificial intelligence should be used to enhance human capabilities, choices and opportunities rather than to replace human beings. The human development approach regards technology as a means and human well-being as the ultimate objective. If artificial intelligence broadly strengthens education, health, knowledge, productivity and decision-making abilities, it can become a complementary force for development. Technological progress or income growth alone does not constitute human development; access to its benefits, equity and its human-centred use are also essential.
- 147. Explanation:** In real Gross Domestic Product, the value of the current year's production is calculated at the constant prices of a selected base year. This removes the effect of changes in prices, particularly inflation, and clearly shows the actual increase or decrease in the volume of production. Gross Domestic Product measured at current prices is called nominal Gross Domestic Product or Gross Domestic Product at current prices. The deduction of depreciation is related to the distinction between gross and net concepts, not to the distinction between real and nominal values. Real Gross Domestic Product is considered more useful for comparing economic growth.
- 148. Explanation:** Non-factor income is a monetary receipt for which no good or service is provided in return in the current production process. Scholarships, pensions, donations and gifts are examples of transfer income. Such receipts are also classified as transfer income because they involve only the transfer of income from one person or institution to another, without creating any new production. Wages, rent and interest are received in return for the services of labour, land and capital, respectively; therefore, they are factor incomes. Only factor income associated with production is included in national income.
- 149. Explanation:** Each factor of production has a specific reward. Land provides natural resources and location, and therefore receives rent in return. Labour provides human effort and receives wages or salaries. Capital provides machines, equipment and financial resources, and its reward is interest. An entrepreneur organises production, makes decisions and bears risks, and therefore receives profit. These four rewards—compensation of employees, rent, interest and profit—form the basis of factor income.
- 150. Explanation:** Poverty is not merely a condition of low income. A person is considered poor when they are unable to meet basic needs such as food, clothing, housing, education and healthcare or to lead a dignified life. The lack of opportunities, capabilities and social security is also an important dimension of poverty. Income-based measurement alone does not fully capture a person's deprivations in education, nutrition, health, sanitation and standard of living. Therefore, a multidimensional approach is adopted in modern poverty analysis.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-3

Answer key

1. (a)	2. (a)	3. (c)	4. (b)	5. (b)	6. (c)	7. (b)	8. (a)	9. (a)	10. (a)
11. (a)	12. (a)	13. (d)	14. (b)	15. (b)	16. (a)	17. (d)	18. (c)	19. (b)	20. (b)
21. (b)	22. (b)	23. (c)	24. (c)	25. (d)	26. (b)	27. (a)	28. (d)	29. (d)	30. (d)
31. (b)	32. (a)	33. (a)	34. (d)	35. (c)	36. (b)	37. (b)	38. (b)	39. (b)	40. (c)
41. (a)	42. (b)	43. (b)	44. (c)	45. (b)	46. (a)	47. (b)	48. (d)	49. (d)	50. (d)
51. (d)	52. (b)	53. (a)	54. (c)	55. (a)	56. (c)	57. (d)	58. (b)	59. (a)	60. (d)
61. (d)	62. (c)	63. (a)	64. (b)	65. (d)	66. (a)	67. (a)	68. (b)	69. (b)	70. (c)
71. (a)	72. (b)	73. (a)	74. (a)	75. (b)	76. (a)	77. (b)	78. (a)	79. (a)	80. (d)
81. (a)	82. (a)	83. (b)	84. (a)	85. (b)	86. (b)	87. (b)	88. (b)	89. (b)	90. (c)
91. (c)	92. (b)	93. (b)	94. (c)	95. (a)	96. (d)	97. (c)	98. (c)	99. (a)	100. (c)
101. (d)	102. (b)	103. (d)	104. (d)	105. (a)	106. (c)	107. (a)	108. (d)	109. (d)	110. (c)
111. (c)	112. (a)	113. (d)	114. (b)	115. (d)	116. (b)	117. (a)	118. (d)	119. (c)	120. (a)
121. (a)	122. (b)	123. (a)	124. (b)	125. (a)	126. (a)	127. (a)	128. (b)	129. (b)	130. (a)
131. (b)	132. (b)	133. (c)	134. (c)	135. (a)	136. (c)	137. (b)	138. (a)	139. (a)	140. (d)
141. (b)	142. (b)	143. (b)	144. (d)	145. (b)	146. (b)	147. (c)	148. (d)	149. (a)	150. (b)

Explanation

1. **Explanation:** An anemometer is an instrument used to measure wind velocity. A barometer measures atmospheric pressure, whereas an ammeter measures electric current. A lactometer measures the relative density of milk. When a temperature-corrected lactometer reading is interpreted together with a fat test, it may provide a preliminary indication of adulteration with water, removal of fat, or an abnormality in solids-not-fat. A sphygmomanometer is an instrument used to measure blood pressure. A fathometer or echo sounder is used to measure the depth of the sea or a reservoir. Therefore, option (a) is correct.
2. **Explanation:** Vitamin D is called the sunshine vitamin. Its active form is calcitriol (1,25-dihydroxyvitamin D), which also has a hormone-like action. It increases calcium absorption in the intestine and assists in bone mineralisation by maintaining the calcium-phosphate balance. Its deficiency causes rickets in children and osteomalacia in adults. Scurvy is associated with vitamin C deficiency. Therefore, option (a) is correct.
3. **Explanation:** In human nutrition, nutrients are generally divided into two categories—macronutrients and micronutrients. The body requires macronutrients in relatively larger quantities than micronutrients, and these include carbohydrates, proteins and fats. Micronutrients are required in smaller quantities and include vitamins and minerals. Therefore, option (c) is correct.
4. **Explanation:** Some measurement uncertainty is associated with a practical measurement result; therefore, the measured value may differ from the reference value. The algebraic difference between the measured value and the reference value is called measurement error. Systematic errors remain constant in successive repeated measurements or vary in a predictable manner. Their causes may be related to the instrument, calibration, measurement method or observer. Parallax error may arise when a scale is not read with the line of sight perpendicular to the surface of the scale. Therefore, option (b) is correct.
5. **Explanation:** Non-metals are fewer in number than metals. Carbon, sulphur, iodine, oxygen and hydrogen are examples of non-metals. Bromine is a non-metal that occurs in the liquid state at room temperature. Generally, non-metals are neither malleable nor ductile; most solid non-metals are brittle. Iodine is a non-metal with a lustrous surface. Graphite, an allotrope of carbon, is a good conductor of electricity. Therefore, option (b) is correct.
6. **Explanation:** The main function of the large intestine is not to carry out major enzymatic digestion. Its principal functions are to absorb water and certain mineral salts from undigested and unabsorbed food residues and to facilitate the formation and movement of faeces. Its major parts are the caecum, colon and rectum. Protein digestion begins in the stomach and is completed in the small intestine, whereas insulin is secreted by the beta cells of the islets of Langerhans in the pancreas. Therefore, option (c) is the correct answer.
7. **Explanation:** *Jatropha*, (*Jatropha curcas*), also known as Ratanjot, is a drought-tolerant angiosperm shrub or small tree that can be grown on degraded or marginal, well-drained land; adequate water, nutrients and management are necessary for better yield. Its seeds contain oil, and after oil extraction and the necessary pre-treatment, this seed oil can be converted into biodiesel through transesterification. Karanja, (*Pongamia pinnata*), is a tree that produces non-edible seed oil, which can also be used as a raw material for biodiesel. Therefore, option (b) is correct.
8. **Explanation:** Dr James Watson and Dr Francis Crick proposed a model of the double-helical, twisted-ladder-like structure of DNA in 1953. The data and images obtained from the X-ray diffraction studies conducted by Rosalind Franklin and Maurice Wilkins provided an important experimental basis for this structural model. The pitch of the B-DNA helix is 3.4 nanometres, and each turn contains approximately 10 base pairs. Therefore, option (a) is correct.
9. **Explanation:** Key pests are those that cause the greatest damage and whose general equilibrium position always remains above the economic injury level. Cotton bollworm and diamondback moth are major examples of such pests. The populations of major pests frequently cross the economic injury level; minor pests rarely cross it; epidemic pests occur in severe outbreaks in a particular season or region; whereas endemic pests are regularly found at low levels in certain limited areas.
10. **Explanation:** The selection of high-yielding rice varieties adapted to specific conditions is extremely important. The major rice varieties capable of photosynthesis even under low-light conditions are IET-27530, CR Dhan-411 and CR Dhan-801. In contrast, Shakti, Ratan and Protina are high-lysine varieties of maize. Framida and N-13 are Striga weed-resistant varieties of sorghum, whereas Vijaya, Nagarjuna and ICTP-8203 are composite varieties of pearl millet.

11. **Explanation:** Parboiling of paddy is a hydrothermal treatment carried out with hot water before milling. It reduces the breakage rate of rice and, most importantly, decreases the loss of vitamin B1, that is, thiamine. Thiamine deficiency causes beriberi. Therefore, parboiling is important not only as a processing technique but also from the perspective of nutrient conservation. It is not a process related to weed control or salinity tolerance.
12. **Explanation:** Kharif crops are monsoon-season crops and are sown in June–July. The major Kharif crops are paddy, maize, sorghum, pearl millet, cotton, pigeon pea and groundnut. Rabi crops are winter-season crops and are sown between October and December. Zaid or summer crops are grown between March and July and include green gram, black gram, watermelon, muskmelon, long melon, cucumber and vegetables.
13. **Explanation:** The Government of India had set the target of eliminating tuberculosis by 2025. For malaria, the targets are to achieve zero indigenous cases by 2027 and complete elimination by 2030. Similarly, the target is to eliminate lymphatic filariasis as a public health problem by the end of 2027. Therefore, all three statements are correct, and option (d) is correct.
14. **Explanation:** “Social mobilisation” refers to community mobilisation. In this process, community members, local institutions, leadership and other stakeholders organise themselves for a common objective. They identify needs and problems, plan solutions and actively participate in their implementation. It is not limited merely to gathering people but is a process that promotes community participation, ownership, local capacity, self-reliance and empowerment. Therefore, option (b) is correct.
15. **Explanation:** Health education is a planned educational process through which accurate health-related knowledge, health-promoting habits, life skills and positive attitudes are developed in individuals and society. It is not limited merely to providing information about diseases. Its objective is to motivate and enable people to make health-promoting decisions and adopt appropriate behaviour. Therefore, option (b) is correct.
16. **Explanation:** One of the major objectives of the National Health Policy, 2017 is to progressively achieve Universal Health Coverage. This means that all people should have access to quality healthcare services without facing financial hardship. The policy emphasises the expansion and improvement of the quality of preventive, promotive, curative, palliative and rehabilitative services. It had set the target of increasing government health expenditure to 2.5 per cent of gross domestic product by 2025. Therefore, option (a) is correct.
17. **Explanation:** The Great Channel, also known as the 6° Channel, is situated between Sumatra, Indonesia, and Great Nicobar Island. The 8° Channel lies between the Maldives and Minicoy; the 9° Channel separates Minicoy from the remaining/main islands of Lakshadweep; and the 10° Channel is situated between Little Andaman and Car Nicobar. Therefore, the correct option relating to the Great Channel is (d).
18. **Explanation:** India’s longitudinal extent is from 68°7′ east longitude to 97°25′ east longitude. Longitudinal extent is important for understanding time differences. As there is a difference of approximately 30° between the longitudes of India’s eastern and western extremities, there is a difference of approximately 2 hours in local time. Option (a) relates to latitudinal extent, and option (d) is irrelevant. Therefore, option (c) is correct.
19. **Explanation:** Indian-American scientist S. Chandrasekhar determined a limit of approximately 1.44 solar masses, which is related to the stability of a white dwarf. Low-mass stars may become white dwarfs at the end of their lives. This limit is particularly related to the stellar life cycle and the final evolution of stars. It is not related to the motion of planets, the Earth’s axis or the period of revolution around the Sun. Therefore, option (b) is correct.
20. **Explanation:** According to the options, the correct sequence of progressive metamorphism is—Slate → Phyllite → Schist → Gneiss. Metamorphic rocks are formed when pre-existing igneous, sedimentary or earlier metamorphic rocks are subjected to extreme heat and pressure. In this process, the original form, colour, mineral composition and hardness of rocks may change. Therefore, option (b) is correct for the sequence of metamorphism.
21. **Explanation:** The Richter magnitude scale measures the magnitude of an earthquake, which is determined on the basis of the amplitude of seismic waves. It was invented by Charles F. Richter in 1935. It is a logarithmic scale; with each unit increase, the amplitude increases 10 times and the energy increases approximately 32 times. The Mercalli intensity scale measures the effects and destruction caused by an earthquake and has levels from I to XII. Therefore, option (b) is correct.
22. **Explanation:** In the study material, the Chotanagpur Plateau has been called the “Ruhr of India”. This epithet is associated with the mineral wealth and industrial importance of the region. The Chotanagpur Plateau is one of the most important and mineral-rich regions of India. Parasnath Hill is also situated in Giridih, Jharkhand. The Malwa, Deccan and Maikal plateaus are important, but the “Ruhr of India” is a distinctive name for the Chotanagpur Plateau. Therefore, option (b) is correct.

- 23. Explanation:** The Indian Council of Agricultural Research has classified the soils of India into eight categories. These include alluvial soil, black soil, red soil, laterite soil, forest soil, desert soil, saline and alkaline soil, and peaty and marshy soil. Owing to the diversity in India's climate, relief and rock structure, regional variations are found in its soils. Therefore, option (c) is correct.
- 24. Explanation:** Institutions such as the Sabha, Samiti and Vidatha were important in the political life of the Rigvedic period. The Vidatha was an ancient institution of the Aryans. The Sabha was an institution of elders and aristocrats, whereas the Samiti was a representative political institution of the general public. Women participated in the Sabha and Samiti during the Rigvedic period. Therefore, the correct answer is option (c).
- 25. Explanation:** In the administration of the Gupta period, the empire was divided into several provinces. A province was called Desha, Avani or Bhukti, and the principal provincial officer of a Bhukti was known as the Uparika. A Bhukti was divided into Vishayas, whose heads were known as Vishayapatis. According to the study material, the smallest administrative unit was the village, not the city. Therefore, option (d) is the correct answer.
- 26. Explanation:** The 'Ariz' Department was first established in India by Balban. The principal functions of this department included military recruitment, inspection of soldiers, equipping soldiers with arms and weapons, and distribution of salaries. Balban separated the military department from the Diwan-i-Wizarat and appointed Imad-ul-Mulk as the Diwan-i-Ariz. Thus, Balban is credited with making the military administration more organised.
- 27. Explanation:** The Revolt of 1857 took place during the tenure of Lord Canning, and he was the last Governor-General appointed by the East India Company. Lord Mayo is associated with the decentralisation of finance and the first census, conducted in 1872 CE. The Vernacular Press Act of 1878 was enacted during the tenure of Lord Lytton. The beginning of local self-government is associated with Lord Ripon. The Partition of Bengal in 1905 took place during the tenure of Lord Curzon. Therefore, among the given options, only option (a) is correct.
- 28. Explanation:** During the tenure of Lord Irwin, the Dandi March began on 12 March 1930, the First Round Table Conference was held in November 1930, and the Gandhi-Irwin Pact was concluded on 5 March 1931. Events relating to the Communal Award, the Poona Pact and the Government of India Act 1935 occurred during the tenure of Lord Willingdon. The Quit India Movement began in August 1942 during the tenure of Lord Linlithgow. The Indian Independence Act 1947 and the 3 June Plan are associated with the tenure of Lord Mountbatten, not Wavell. Therefore, option (d) is false.
- 29. Explanation:** The symbols associated with the life of the Buddha are clearly mentioned as follows—the lotus and bull are described as the symbols of birth, the horse as the symbol of the Great Renunciation, and the peepal or Bodhi tree as the symbol of Enlightenment. Footprints are the symbol of Nirvana, whereas the stupa is described as the symbol of Mahaparinirvana. Therefore, option (d) is false.
- 30. Explanation:** The missionaries sent by Ashoka for the propagation of Dhamma are mentioned as follows—Mahendra and Sanghamitra were sent to Sri Lanka, Majjhantika to Kashmir and Gandhara, Sona and Uttara to Suvarnabhumi, and Maharakshita to the Yavana kingdom. Therefore, the statement that Maharakshita was sent to Magadha is incorrect. Thus, the correct answer is option (d).
- 31. Explanation:** The State Election Commission performs the functions of preparing electoral rolls and exercising superintendence, direction and control over elections to Panchayats and Municipalities. The State Election Commissioner is appointed by the Governor. The State Election Commissioner may be removed only in the same manner and on the same grounds as a Judge of a High Court. It is an important constitutional institution for ensuring free and fair elections to local bodies. The Election Commission of India does not conduct elections to Panchayats and Municipalities; these elections are conducted by the State Election Commission.
- 32. Explanation:** Part-XV of the Constitution contains provisions relating to elections under Articles 324 to 329. Under Article 324, the power of superintendence, direction and control of elections to Parliament, State Legislatures, and the offices of the President and Vice-President is vested in the Election Commission of India. The Chief Election Commissioner and other Election Commissioners are appointed by the President, subject to the law made by Parliament. Elections to local bodies, such as Panchayats and Municipalities, are conducted by the State Election Commission, not by the Election Commission of India. Therefore, option (a) is correct.
- 33. Explanation:** The pardoning power of the President is provided under Article 72 of the Constitution. Under it, the President may exercise the power to grant pardons, reprieves, respites or remissions of punishment, and to suspend, remit or commute sentences. This power applies particularly in cases involving a Court Martial, offences relating to Union laws, and death sentences. The President has the power to grant a complete

pardon in cases of death sentences; the Governor cannot pardon a death sentence, although, under the law, the Governor may exercise the power to suspend, remit or commute it. Article 111 relates to the President's assent to Bills, Article 123 to Ordinances, and Article 143 to the President's power to consult the Supreme Court.

34. Explanation: The Indian Constitution has borrowed several provisions from different countries. The parliamentary system of government, rule of law, single citizenship and bicameral system were borrowed from Britain. Provisions such as Fundamental Rights, judicial review, the office of the Vice-President and the impeachment procedure were borrowed from the United States. The Directive Principles of State Policy, the method of election of the President and the provision for nomination to the Rajya Sabha were borrowed from Ireland. The Fundamental Duties were inspired by the Soviet Union, not Australia.

35. Explanation: The Governor is the constitutional head of a State. According to Article 153, there shall be a Governor for each State; the same person may also be appointed as the Governor of two or more States. Under Article 155, the Governor is appointed by the President. According to Article 157, to become a Governor, a person must be a citizen of India and must have completed 35 years of age. According to Article 156, the Governor holds office during the pleasure of the President. The oath of office is administered to the Governor by the Chief Justice of the High Court concerned or, in the Chief Justice's absence, by the senior-most judge of that High Court.

36. Explanation: Welfare measures are not intended only to provide short-term assistance to the poor. Various welfare policies collectively expand economic opportunities, social security, food

and nutritional security, employment, financial inclusion and access to productive resources. Education, health and skill development contribute to the formation of human capital. Schemes implemented for the poor, farmers, women, workers, and disadvantaged rural and urban communities reflect this broader vision of inclusive development and social justice.

37. Explanation: In 1990–91, India faced a severe balance-of-payments crisis. By June 1991, foreign exchange reserves had declined to barely enough to cover approximately one week's imports. Large fiscal and current-account imbalances, rising external debt and heavy debt-servicing obligations constituted the structural backdrop to the crisis. The increased oil import bill due to the Gulf War, political uncertainty and rising prices made the crisis even more severe. India had to seek assistance from the International Monetary Fund and the World Bank. Stabilisation and structural reforms were implemented in 1991. These reforms are broadly classified under liberalisation, privatisation and globalisation.

38. Explanation: The industrialisation strategy of the Second Five-Year Plan was based on the Mahalanobis Model. It accorded priority to heavy industries, basic industries and the production of capital goods. Its central argument was that increasing the domestic capacity to produce machines and means of production would enhance future productive capacity, long-term economic growth and industrial self-reliance. This strategy contributed to the creation and diversification of India's industrial base. However, the relatively lower priority accorded to the agricultural and consumer goods sectors, along with the later licence-permit system and the inefficiency of public enterprises, were among the main grounds for criticism of the strategy.

39. Explanation: After Independence, India adopted a mixed-economy model in which both the public and private sectors had a role. The Planning Commission was established on 15 March 1950, and the era of Five-Year Plans began. The general objectives of these plans were economic growth, modernisation, self-reliance and equity. Different plans accorded different degrees of importance to these objectives. With effect from 1 January 2015, NITI Aayog was constituted in place of the Planning Commission. The Twelfth Five-Year Plan (2012–17) was the final Five-Year Plan; thereafter, the Five-Year Plan process was discontinued.

40. Explanation: The main objective of the Uttar Pradesh Government's 'Ganga Project' is to extend digital connectivity to the last mile in rural areas, not only in urban areas. By promoting digital education, e-governance, telemedicine and skill development, the project will create 8,000 digital entrepreneurs. Selected youth will be provided an interest-free loan of up to 5 lakh rupees under the 'Mukhyamantri Yuva Yojana'.

41. Explanation: According to the TOP500 list recently released in Hamburg, Germany, China's 'Lineshine' (2.198 exaflops) ranked first as the world's fastest supercomputer. It surpassed the United States' 'El Capitan', which moved to second place. In this list, 'Frontier' is ranked third, 'Aurora' fourth and 'Jupiter' fifth.

42. Explanation: The first World Yogasana Championship 2026 was held from 4 to 8 June 2026 in Ahmedabad, Gujarat, not in Bhopal. Athletes from 79 countries participated in it. India delivered an outstanding performance and topped the medal table by winning a total of 114 medals, including 102 gold medals. The championship was supported by the Ministry of AYUSH and SAI.

43. **Explanation:** On 18 July 2026, Skyroot Aerospace successfully launched India's first private orbital launch vehicle, 'Vikram-1', from Sriharikota under 'Mission Aagaman'. This rocket has the capacity to place small satellites weighing up to 350 kilograms into Low Earth Orbit (LEO). It has been named after Dr Vikram Sarabhai, the father of India's space programme.

44. **Explanation:** Reliance Industries and Meta have announced India's first 168-megawatt 'built-to-suit' AI data centre in Jamnagar, Gujarat. It will be powered entirely by renewable energy. For cooling, 'desalinated seawater' (Desalinated Sea Water) will be used instead of groundwater to avoid placing pressure on the environment and water resources.

45. **Explanation:** Given:
Volume of each cube = 216 cm^3
Let 'a' be the length of each side of a cube.

$$\begin{aligned}\therefore a^3 &= 216 \\ a &= (216)^{1/3} \\ a &= 6 \text{ cm}\end{aligned}$$

When the four cubes are joined, the length of the cuboid formed is:

$$\text{Length (l)} = 6 + 6 + 6 + 6 = 24 \text{ cm}$$

$$\text{Breadth (b)} = 6 \text{ cm}$$

$$\text{Height (h)} = 6 \text{ cm}$$

$$\text{Total surface area of the cuboid} = 2(lb + bh + hl)$$

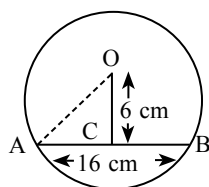
$$= 2(24 \times 6 + 6 \times 6 + 6 \times 24)$$

$$= 2(144 + 36 + 144)$$

$$= 2 \times 324$$

$$= 648 \text{ cm}^2$$

46. **Explanation:**



$$AC = \frac{AB}{2} = \frac{16}{2} = 8 \text{ cm.}$$

$$\text{Radius of the circle (OA)}$$

$$= \sqrt{(AC)^2 + (OC)^2}$$

$$= \sqrt{(8)^2 + (6)^2}$$

$$= \sqrt{64 + 36} = \sqrt{100} = 10 \text{ cm.}$$

47. **Explanation:** For option (a) - 830942 is divisible by 2, but not by 5, 10 or 11.

For option (b) - 589270

Unit digit = 0

$$\left[\begin{array}{l} \text{Divisible by 2} \\ \text{Divisible by 5} \\ \text{Divisible by 10} \end{array} \right]$$

$$(5 + 9 + 7) - (8 + 2) = 0/11$$

[By the divisibility rule for 11]

$$21 - 10 = 11$$

$$11 = 11$$

Therefore, the number given in option (b) is divisible by 2, 5, 10 and 11.

48. **Explanation:** $\therefore a + \frac{1}{a} = 12$

$$\therefore a^2 + \frac{1}{a^2} = (12)^2 - 2 = 142$$

49. **Explanation:** The largest chord of a circle is its diameter. Therefore, the distance between the longest chord and the centre of the circle is equal to zero units.

50. **Explanation:** 45)7658(17

$$\underline{45}$$

$$\underline{315}$$

$$\underline{315}$$

$$\times \times \times 8$$

Therefore, the number divisible by 45

$$= (7658 - 8)$$

$$= 7650$$

51. **Explanation:** Counselling is not a casual conversation but a systematic and purposeful process. It involves two parties—the counsellor and the client. A trained counsellor uses knowledge, experience and specialised skills. The principal objective is to enable the client to engage in self-help, solve problems and make better decisions, as well as to facilitate positive changes in thought, feeling and behaviour. Creating permanent dependency is not the objective of counselling. Therefore, option (d) is the correct answer.

52. **Explanation:** The Assertion and the Reason are both generally correct. Evolving and progressive ideas play an important role in the progress of society. Similarly, values such as truth, honesty, respect, compassion, freedom

and justice guide the evaluation of moral choices and the determination of right and wrong. However, the Reason merely states the role of values in moral decisions; it does not explain why the progress of society depends on continuously evolving ideas. Therefore, the Reason does not correctly explain the Assertion, and option (b) is correct.

53. **Explanation:** The observance of Dharma is not regarded as being limited merely to worship or literacy; rather, it means putting the values of a meaningful life into practice. Truth and non-violence include adherence to truth and not causing suffering to any living being. Control of the senses inspires one to remain free from lust and greed. Dedication to the Guru means respect for the teacher and following the teacher's ideals. Protection of nature instils a sense of responsibility towards the environment. Therefore, the correct matching is A-4, B-2, C-3, D-1.

54. **Explanation:** In modern life, daily problems, mental stress, the risk of suicide, changing family structures, the challenges of child-rearing, competition in education and careers, and the negative effects of the internet and social media increase the need for counselling. Numerous alternatives may confuse an individual while making a decision. Counselling provides support, facilitates behaviour modification and develops the ability to make appropriate decisions. Therefore, option (c) is the correct answer.

55. **Explanation:** Communication begins with the sender, with whom the idea or information originates. The sender converts the idea into words, pictures or symbols, which is called encoding. The message reaches the receiver through an appropriate medium. The receiver decodes it, understands its meaning and responds. This feedback completes the cycle. Therefore, the given sequence is correct.

- 56. Explanation:** Direct control operates through close relationships. Persons such as parents, friends and teachers directly influence behaviour; therefore, its effect may be deep and long-lasting. Indirect control comes from the broader social environment, institutions and groups and is relatively less personal. Therefore, option (c) is the principal characteristic of direct control.
- 57. Explanation:** Giving praise, a medal or an honour for good work motivates an individual to repeat behaviour in accordance with social standards. For the violation of rules, punishments such as fines, imprisonment or social ostracism may be imposed so that the individual and other members refrain from repeating the mistake. Therefore, social ostracism may also be a form of punishment. Hence, the third statement is incorrect and the first two are correct; therefore, option (d) is the correct answer.
- 58. Explanation:** In the Patanjali Yoga Sutra, through 'Yogas citta-vritti-nirodhah', Yoga is defined as the control of the modifications of the mind. The Bhagavad Gita links Yoga with mental equilibrium through 'Samatvam Yoga Ucyate', and the Mahopanishad regards Yoga as a means of calming the mind. Yogic health extends beyond physical, mental and social well-being to include spiritual self-realisation. Therefore, option (b) is the correct answer.
- 59. Explanation:** Before communication, the sender should be clear about what they wish to say. Thereafter, it is necessary to determine the actual purpose of the message—to provide information, give an order, persuade or seek an opinion. At the third level, the physical and human context, including the time, place and mental state of the receiver, should be taken into account. Therefore, the given sequence is correct.
- 60. Explanation:** Indian philosophy identifies four principal Purusharthas of human life. Artha is related to the acquisition of material resources and the sustenance of life. Kama represents the fulfilment of desires and the enjoyment of life. Dharma is the basis of the rules that bind society and of moral duties. Moksha is the highest goal of life and liberation from karmic bondage. Therefore, the correct matching is A-3, B-2, C-4 and D-1.
- 61. Explanation:** Tönnies called close community relationships 'Gemeinschaft' and formal, self-interest-based relationships 'Gesellschaft'. According to him, industrialisation brought about a shift from traditional close-knit communities to more formal and utilitarian relationships, which may increase the sense of loneliness. Therefore, option (d) is the correct answer.
- 62. Explanation:** According to the dual-attitude model, learning a new attitude does not necessarily eliminate the old attitude. The new attitude may be expressed consciously and explicitly, while the old attitude may remain in memory in an implicit form and influence automatic behaviour.
- 63. Explanation:** Here, the 'gradient' relationship refers to the income–health gradient. On average, health improves and the risk of premature death decreases as income increases. This relationship is not limited only to the poverty line and is steeper at lower income levels. Beyond a level approximately twice the median income, the slope of the relationship gradually begins to flatten. Therefore, option (a) is correct.
- 64. Explanation:** According to the cited definition in the Encyclopedia of Health, health is the state in which an individual is capable of using their intellectual, emotional and physical resources to live daily life optimally. This definition does not regard health merely as freedom from biological disease, but associates it with the individual's overall functional capacity. Therefore, option (b) is correct.
- 65. Explanation:** Barker's early origins hypothesis states that conditions during pregnancy and the initial stages of life may influence subsequent health. Foetal malnutrition or an adverse gestational environment may cause long-term changes in the body's development and metabolism. This may subsequently increase the risk of diseases such as coronary heart disease, hypertension, stroke and type 2 diabetes. It indicates only the risk and does not make the occurrence of disease certain.
- 66. Explanation:** The Head Count Ratio is the simplest and most popular method of measuring poverty. It shows the percentage of poor people in the total population. Its major limitation is that it does not indicate how poor the poor are. Example: If two countries have the same Head Count Ratio, but the poor in one country are further below the poverty line, poverty will be deeper in that country. Therefore, option (a) is correct.
- 67. Explanation:** According to the Lancet Commission, the systematic neglect of culture is the greatest obstacle to achieving the highest attainable standard of health. Health and well-being are not merely biological conditions but are also influenced by socio-cultural meanings. Language, local beliefs, the decision to seek treatment and doctor–patient trust influence health behaviour. Therefore, option (a) is correct.
- 68. Explanation:** Body Mass Index and anaemia are important indicators in assessing the nutritional status of women. BMI is used to assess underweight, normal weight, overweight and obesity. Anaemia is determined by the level of haemoglobin in the blood and may be an indicator of poor nutrition and poor health. Therefore, the correct answer is option (b).

- 69. Explanation:** The two major dimensions of health-care equity are horizontal and vertical equity. In horizontal equity, people with equal needs are given equal treatment. In vertical equity, appropriately different or greater resources are provided according to the level of need. Therefore, people with greater needs may receive greater assistance, and option (b) is correct.
- 70. Explanation:** Beyond WHO's original definition, two additional dimensions of health—spiritual and occupational—have been recognised. The spiritual dimension is related to the deeper meaning and purpose of life, morality, principles and a sense of connection with a wider existence or the entire universe. The occupational dimension is associated with job satisfaction, self-esteem and mental comfort derived from work or occupation. Therefore, associating the spiritual dimension with morality, principles and inner peace is correct.
- 71. Explanation:** The Health Belief Model is a health-behaviour model developed in the 1950s. According to its modern extended form, the likelihood of an individual adopting preventive health behaviour is influenced by perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy. Perceived susceptibility refers to the extent to which an individual considers themselves at risk of a disease. Therefore, option (a) is correct.
- 72. Explanation:** In the structural-cognitive division of social capital, the cognitive component is related to people's subjective perceptions and shared norms. It includes mutual trust, reciprocity, solidarity and the tendency to cooperate. In contrast, the structural component is associated with social networks, group membership and participation. Therefore, option (b) is correct.
- 73. Explanation:** The East India Association was founded by Dadabhai Naoroji in London in 1866. It received the cooperation of Indians residing in London and retired British officials. Its objective was to acquaint the British public and Parliament with Indian problems. This organisation attempted to shape British public opinion in favour of India. The London Indian Society had been formed earlier and was subsequently replaced by the East India Association.
- 74. Explanation:** Hyderabad was one of the largest and richest of all the princely states. The majority of its population was Hindu, whereas its ruler, Nizam Mir Osman Ali Khan, was a Muslim. The Nizam was unwilling to accede to India and wanted to remain independent. The activities of armed extremist elements began to increase in Hyderabad. The Government of India decided to undertake military action in September 1948 and launched Operation Polo. On 17 September 1948, the Nizam declared a ceasefire.
- 75. Explanation:** The Dashavatara Temple at Deogarh is regarded as an outstanding example of Gupta-period temple art. It is a Vishnu temple situated in Lalitpur district of Uttar Pradesh and is regarded as the earliest known Panchayatana temple in North India. Sculptural panels are found on its high plinth, and figures of Ganga and Yamuna appear at the doorway. Vaishnava narratives such as Gajendra Moksha, the penance of Nara-Narayana and Anantashayi Vishnu have been carved on it.
- 76. Explanation:** The Second Round Table Conference was held in London from 7 September 1931 to 1 December 1931. Gandhiji participated in it as the sole representative of the Congress. The principal dispute at the Conference concerned communal representation. Dr B. R. Ambedkar demanded separate electorates for the Depressed Classes, whereas Gandhiji opposed this demand. Consequently, the Conference could not reach any concrete decision.
- 77. Explanation:** The Indian Councils Act, 1909 is also known as the Morley-Minto Reforms. It was associated with the then Secretary of State for India, John Morley, and Viceroy Lord Minto. This Act increased the size of the Central and Provincial Legislative Councils. Its most controversial feature was the provision of separate electorates for Muslims, under which Muslim representatives were elected only by Muslim voters. This made communal identity the basis of political representation and subsequently provided a legal basis for communal politics.
- 78. Explanation:** After the Second World War, the Labour Party government in Britain sent the Cabinet Mission to find a solution to India's constitutional problem. The Mission arrived in India in March 1946. It comprised Lord Pethick-Lawrence, Sir Stafford Cripps and A. V. Alexander. In May 1946, the Mission presented a plan which, instead of partitioning India, proposed a federal arrangement, called the Union of India, incorporating the princely states. Defence, foreign affairs and communications were to remain with the Union, while the remaining subjects were to remain with the provinces.
- 79. Explanation:** Mauryan polish is regarded as a major technological achievement of this period. In this technique, the stone surface was made extremely lustrous, giving sculptures and pillars a mirror-like sheen. Ashoka's pillar at Sarnath and the Didarganj Chauri-Bearer Yakshi found at Patna in Bihar are outstanding examples of this polish. This polish reflects the high technical proficiency, aesthetic sensibility and mature mastery over stone achieved by Mauryan craftsmanship.

- 80. Explanation:** India was not a direct theatre of war, yet the First World War profoundly affected Indian society and the economy. Soldiers, money, raw materials, horses, mules, grain and cotton were sent from India to support the British war effort. Approximately 15 lakh men of the Indian Army contributed to the British victory. The war increased the burden of taxation and the prices of essential commodities in India. Indians expected that they would receive self-government in return for their cooperation, but the failure to obtain the expected reforms gave new impetus to the national movement.
- 81. Explanation:** In 1926, Bhagat Singh and his revolutionary associates founded the Naujawan Bharat Sabha in Lahore. It was an open platform for organising young people. Its objectives were to attain complete independence, promote social reform, oppose communalism and untouchability, and bring workers and peasants into the national movement. The Sabha inspired young people through the memory of Ghadar martyrs and other revolutionary martyrs, including Kartar Singh Sarabha. The Naujawan Bharat Sabha became an important medium for the ideological and mass-contact activities of the revolutionary movement.
- 82. Explanation:** The failure of the Cripps Mission, wartime inflation, the foodgrain crisis, fear of a Japanese invasion and British repression made the atmosphere explosive. In July 1942, the Congress Working Committee at Wardha passed a resolution demanding the immediate termination of British rule. The All India Congress Committee met at Gowalia Tank Maidan in Bombay on 7–8 August 1942. The Quit India Resolution was passed on 8 August 1942, and Gandhiji gave the historic call of “Do or Die”.
- 83. Explanation:** In the study material, a teacher who taught the Vedas and Vedangas to earn a livelihood is called an Upadhyaya. Hota, Adhvaryu and Udgata are priests associated with Vedic sacrifices. Hota is associated with the Rigveda, Adhvaryu with the Yajurveda and Udgata with the Samaveda. The function of the Upadhyaya was related to education, particularly the teaching of the Vedas and Vedangas. Therefore, the correct answer here is Upadhyaya.
- 84. Explanation:** The Indian Association of Calcutta was founded by Surendranath Banerjee and Ananda Mohan Bose on 26 July 1876. Before the establishment of the Congress, it was regarded as the most important all-India political organisation. This organisation opposed the reduction of the age limit for the Indian Civil Service examination and demanded that the age be fixed at 22 years. Holding the Civil Service examination simultaneously in India and England, opposing the Vernacular Press Act and supporting the principle of the Ilbert Bill were among its principal programmes.
- 85. Explanation:** The word ‘Upanishad’ is derived from ‘upa + ni + sad’, which means acquiring knowledge by sitting near the guru. The Upanishads are the concluding and philosophical parts of Vedic literature and are therefore also called Vedanta. They discuss Atman, Brahman, Jagat, moksha, vidya-avidya and the ultimate goal of life. The Upanishads are regarded as the fundamental source of Indian philosophy. Therefore, the guru-disciple dialogue is their principal method.
- 86. Explanation:** The literal meaning of ‘Stupa’ is a heap or mound. In the Pali language, the word ‘Thupa’ is used for it. In the Buddhist tradition, a stupa was regarded as a sacred place for preserving the relics of the Buddha or his followers, such as bones, ashes or objects associated with them. Later, the stupa was no longer merely a reliquary monument; it became a major centre of worship, meditation, circumambulation and Buddhist art.
- 87. Explanation:** The Revolt of 1857 was an extremely important event in Indian history. It began as military discontent, but peasants, artisans, craftsmen, taluqdars, zamindars, deposed rulers and many sections of the general population became involved in it. It was an eruption of widespread discontent against the political, economic, socio-religious and military policies of the British East India Company. Therefore, regarding it merely as a military event would understate its broader character.
- 88. Explanation:** Learning is a relatively permanent change arising from experience or practice. A decline in performance caused by fatigue is temporary, and performance may return to normal after rest; therefore, such a change is not regarded as learning. Similarly, temporary behavioural changes caused by intoxication, illness or a heavy meal do not fall within the category of learning. In contrast, a handwashing technique, remembering a route and preparing a life-saving solution are behaviours learned through experience and practice, whose effects may be relatively permanent. In teaching health behaviour, the judicious use of practice, outcomes, timing and circumstances in accordance with this principle may be more effective.
- 89. Explanation:** Modern psychology in India began in 1915 in the Department of Philosophy at the University of Calcutta, where the first course in experimental psychology was introduced and the first psychology laboratory was established. In the following year, 1916, the first Department of Psychology

was established. Later, in 1938, a department or branch of Applied Psychology was started. Therefore, the correct sequence of events is 1915, 1916 and 1938. This sequence reflects the experimental, institutional and applied expansion of psychology in India.

- 90. Explanation:** Perception pertains to a person, object, picture, sound or event. The external object or event that acts on the sense organs and gives rise to sensation is called a stimulus. The stimulus affects the sense organs, thereby producing sensation, and the brain interprets that sensation to determine its meaning. A sense organ is the medium through which the stimulus is registered, whereas a subsequent response may be an outcome of perception. Therefore, option (c) correctly identifies the stimulus. Therefore, while interpreting an individual's development or response, the biological basis, previous experience and present circumstances should all be considered.
- 91. Explanation:** Behaviour includes actions and responses such as speaking, walking, reading, crying, laughing, cooperating, protesting, taking medicine on time, getting vaccinated or avoiding going to a health centre. Some of these behaviours are directly observable, whereas others are inferred from circumstances and responses. Psychology understands behaviour by relating it to the underlying thoughts, fears, beliefs, motivations and social influences. Therefore, behaviour is not confined merely to visible action or socially acceptable conduct. This distinction is particularly helpful in understanding community behaviour without prejudice and selecting evidence-based health interventions.
- 92. Explanation:** In long-term memory, a person's experiences, knowledge, language, skills, habits, emotional memories and meaningful facts can

remain stored for a long period. Its capacity is considered vast, and information may persist for periods ranging from some time to an entire lifetime. Because the amount of learning and the degree of consolidation are greater in long-term memory, forgetting is relatively less. In contrast, short-term memory and sensory memory are limited in duration and capacity. Therefore, option (b) presents the correct characteristic of long-term memory.

- 93. Explanation:** The smallest sound unit of spoken language is called a phoneme. It may be meaningless in itself. When phonemes combine to form a meaningful unit such as a word, prefix or suffix, that unit is called a morpheme. Thus, a morpheme is the smallest meaningful unit of language. Morphemes and words are further combined according to rules to form sentences. Therefore, option (b) correctly distinguishes between the two concepts.
- 94. Explanation:** Operant conditioning is based on the consequences of behaviour; therefore, the characteristics of reinforcement are extremely important. The type, number, schedule and quality of reinforcement influence the direction and strength of the response. When reinforcement is provided immediately after a response, the association may become clearer, whereas a longer time interval may weaken learning. The nature and difficulty of the response to be learned are also important. Therefore, all four given factors influence operant learning.
- 95. Explanation:** The work of a Health Education Officer is not merely to provide medical treatment but to understand and improve the health behaviour of the community. Psychology helps in understanding why a person fears vaccination, stops taking medicine midway, does not adopt hygiene practices, turns

to substance use or hesitates to seek mental health assistance. Therefore, it is used in diverse areas such as vaccination, nutrition, maternal and child health, adolescent health, family planning, de-addiction and the prevention of lifestyle diseases.

- 96. Explanation:** Substance addiction is a condition in which a person repeatedly uses alcohol, tobacco, opium, bhang, ganja, charas, heroin, cocaine, synthetic drugs, inhalants or certain medicines and gradually develops physical, psychological or behavioural dependence on them. Over time, such use may go beyond the person's control. It is not merely a moral weakness but a complex problem related to mental health, motivation, social learning and the environment. Therefore, instead of blaming the person experiencing the problem, their biological, psychological, familial and social context should be understood comprehensively.
- 97. Explanation:** In negative reinforcement, the reduction of an unpleasant condition increases the likelihood of repetition of a behaviour. If a person experiences a temporary reduction in stress, anxiety or sadness after substance use, that relief may motivate the person to repeat the substance-use behaviour in the future. Here, 'negative' does not mean punishment but the removal of an unpleasant experience. Therefore, substance use may become a learned means of escaping stress for the person, and option (c) is correct.
- 98. Explanation:** According to the law of continuity, a person perceives lines, shapes or information as a continuous and orderly flow rather than as broken pieces. Presenting handwashing, the preparation of a life-saving solution, the sequence of antenatal check-ups or a regular treatment procedure in clear steps enables people to understand and remember the entire process easily. A disorganised presentation of the steps may create confusion.

- 99. Explanation:** In retroactive inhibition, newly learned material interferes with the recall of the original material learned earlier. For example, after learning one list, learning a second list may make it difficult to recall the words of the first list. Here, new information exerts a backward effect and interferes with old information. In proactive inhibition, previously learned material interferes with material to be learned or recalled later. Therefore, option (a) is correct.
- 100. Explanation:** Dengue occurs mainly in tropical and subtropical regions, where temperature, humidity and water accumulation may be favourable for the breeding of *Aedes* mosquitoes. Urbanisation, unplanned settlements, clean stagnant water in household containers and climate change may extend its spread to new areas. Small towns and rural–urban transition zones may also be affected.
- 101. Explanation:** A Health Education Officer should plan according to local geographical, social and environmental risks. In Purvanchal and the Terai, floods, waterlogging, safe water and vector control may be major concerns. In Bundelkhand, drought, water scarcity, nutrition and heat waves are important. In western Uttar Pradesh and the National Capital Region, special attention may be required for air pollution and respiratory diseases. Vulnerable groups such as children, pregnant women, older persons, persons with disabilities and labourers should also be identified. A uniform message cannot adequately address regional risks. In disaster management, advance preparedness and the protection of vulnerable groups are necessary to reduce mortality and disease burden.
- 102. Explanation:** In rural areas, low income, limited food diversity, lack of maternal education, open defecation, contaminated water, recurrent infections and limited access to health services may increase malnutrition. In tribal areas, forest-based livelihoods, geographical inaccessibility, seasonal food availability and distance from services may be additional factors. Low birth weight and maternal anaemia are also associated with child malnutrition. Therefore, food distribution alone is not sufficient; an integrated approach involving safe water, sanitation, maternal and child care, infection control and local food resources is necessary. To improve nutrition, food, sanitation, infection control and social protection must be implemented together.
- 103. Explanation:** Down syndrome is also commonly called trisomy 21 because it involves an extra copy of chromosome 21. It may result in intellectual disability, certain characteristic physical features, heart defects, thyroid problems and developmental delay. The deletion of a part of chromosome 5 is associated with Cri-du-chat syndrome. Down syndrome is not infectious and does not spread through contaminated blood. Early identification, prompt diagnosis, developmental support, health check-ups and family counselling help to improve the child's quality of life.
- 104. Explanation:** Extreme heat places pressure on the thermoregulatory capacity of the human body. It may cause heat stroke, dehydration, exhaustion, kidney-related problems and reduced productivity among outdoor workers. Children, older persons, pregnant women, farmers, labourers and people with chronic diseases are at particular risk. Health education emphasises adequate water intake, rest in the shade, avoidance of strenuous work during intense midday heat and recognition of the signs of heat stroke. Hypothermia and pneumonia are mainly associated with extreme cold.
- 105. Explanation:** A sporadic disease appears occasionally and in small numbers. An endemic disease remains continuously present in a particular area. An epidemic is said to occur when a disease increases more rapidly than expected in an area. A pandemic is a situation in which an epidemic spreads across many countries or continents, as occurred with COVID-19. This classification helps in determining the intensity of disease surveillance and response. The four terms are not identical and mainly describe patterns of disease spread.
- 106. Explanation:** A congenital disease is one that is present from birth, whereas a genetic disease is caused by a change in a gene or chromosome. The two may partially overlap, but they are not entirely identical. Some congenital disorders may be caused by infection, nutritional deficiency or environmental factors and may not be genetic. On the other hand, genetic diseases such as Huntington's disease generally manifest in adulthood.
- 107. Explanation:** Malnutrition may reduce the body's immunity, as a result of which a child may repeatedly be affected by diarrhoea, pneumonia, malaria or helminth infections. These infections reduce appetite, decrease the absorption of nutrients and increase the body's nutritional requirements. Consequently, weight and growth deteriorate further, and malnutrition becomes more severe. To break this cycle, an adequate diet, breastfeeding, complementary feeding, vaccination, deworming, safe water, sanitation and timely treatment are necessary. Neither food nor medicine alone is always sufficient. To improve nutrition, food, sanitation, infection control and social protection must be integrated.
- 108. Explanation:** Ayushman Arogya Mandirs have been developed by upgrading Sub-Health Centres and rural or urban Primary Health Centres

to bring comprehensive primary health care closer to people's homes. Services provided here include maternal and child health, adolescent health, family planning, identification of communicable diseases, screening for diabetes, hypertension and common cancers, care for older persons, mental health, yoga and lifestyle counselling. These are not merely treatment centres but centres for prevention and health promotion. Organ transplantation is a tertiary care service.

- 109. Explanation:** During a cold wave, prolonged exposure to low temperatures may cause the body temperature to fall dangerously, which is known as hypothermia. Cold weather may increase the risk of pneumonia, asthma and other respiratory diseases. The additional strain on the heart may also increase the risk of heart attack and death among older persons. Homeless persons, older persons, children and chronically ill patients are particularly vulnerable. Therefore, warm shelter, adequate clothing, hot food and monitoring of at-risk groups are necessary. Heat cramps are a heat-related problem, whereas dengue is a mosquito-borne disease.
- 110. Explanation:** Geographical Information System (GIS), mapping and local data help identify which villages, wards or blocks are at greater risk of a particular disease. Such areas may be called disease hotspots. After identifying hotspots, vaccination, medicine distribution, fogging, screening and health education may be prioritised in those locations. This makes the use of limited resources more rational and effective.
- 111. Explanation:** Cri-du-chat syndrome involves the deletion of a part of chromosome 5. It is also called 5P deletion syndrome or 5P syndrome. The cry of an affected infant may sound like that of a cat, and developmental delay and intellectual disability may also occur. An extra

copy of chromosome 21 is associated with Down syndrome; an extra X chromosome is associated with Klinefelter syndrome; and an alteration in mitochondrial DNA is associated with mitochondrial diseases such as MELAS. Therefore, Cri-du-chat syndrome is an example of a structural chromosomal disorder. Developmental support and multidisciplinary care may be important for the affected child.

- 112. Explanation:** Underweight means low weight-for-age. An underweight child may have stunting, wasting or both; therefore, underweight may serve as a combined indicator of acute and chronic nutritional problems. Low height-for-age is called stunting, and low weight-for-height is called wasting. In adults, a body mass index (BMI) of 30 or more indicates obesity, not underweight. Accurate recording of weight, height and age is necessary in growth monitoring so that at-risk children can receive timely nutrition services and referral. To improve nutrition, food, sanitation, infection control and social protection must be integrated.
- 113. Explanation:** In an autosomal dominant disease, the disease may manifest even when only one defective copy of a gene is present. If either the mother or father has the disease, the risk to the offspring increases. Huntington's disease and Marfan syndrome are examples. In contrast, an autosomal recessive disease generally manifests when defective genes are inherited from both parents. Autosomal dominant diseases may affect both females and males, whereas X-linked diseases may have a sex-specific pattern of transmission. Contaminated food is a mode of transmission of communicable diseases, not of genetic inheritance. Correct identification of the disease category enables the selection of an appropriate strategy for screening, prevention, treatment and counselling.

114. Explanation: An ASHA worker is an important link between the community and the health system. She provides information about nutrition, basic sanitation, hygienic habits, healthy living and working conditions, and the timely use of available health services. Therefore, her work is related to local social and geographical conditions. Hence, statements 1 and 2 are correct, whereas statement 3 is incorrect. Without an understanding of the local context, an ASHA worker's behaviour-change work may be less effective.

- 115. Explanation:** In rural areas, the utilisation of antenatal check-ups and institutional delivery may be influenced not only by the woman's decision but also by family support, social influence, local leadership and assistance received from health workers. The husband, mother-in-law and family may play a role in providing support and arranging timely transport. The Panchayat may contribute to local support and service coordination, whereas the ASHA and ANM assist with antenatal check-ups, counselling, birth preparedness and access to institutional delivery. Such cooperation should respect the woman's choice and decision-making autonomy. Distance and transport are also important, but they are geographical and service-access-related factors. Therefore, option (d) is correct.
- 116. Explanation:** The urban population is not homogeneous. Along with high- and middle-income groups, cities are inhabited by diverse groups such as migrant labourers, slum dwellers, homeless persons, workers in the unorganised sector, students and older persons living alone. There may be wide differences among these groups in income, housing, working conditions and access to health services. Therefore, the mere availability of facilities in cities does not mean that all residents have adequate access to them. Hence, option (b) is correct.

- 117. Explanation:** Health promotion is a process that enables people to gain greater control over their health and its determinants and to improve their health. A healthy lifestyle is an important, but not the only, aspect of it. It includes health education and life skills, healthy public policy, supportive environments for health, community action, and reorienting health services towards health promotion. Yoga and exercise, a balanced diet, avoidance of substance abuse, and care of mental health are its practical examples. It enhances the capacity of both individuals and communities. Therefore, medication alone, hospitalisation, or specialist-centred decisions do not constitute the complete meaning of health promotion. Hence, option (a) is correct.
- 118. Explanation:** An autoclave uses pressurised steam for sterilisation, and 121 degrees Celsius is a common cycle temperature. Ethylene oxide is useful for the low-temperature sterilisation of heat- or moisture-sensitive medical and dental instruments that cannot be sterilised by steam. After proper pre-cleaning, 2 percent glutaraldehyde may be used, in accordance with the manufacturer's instructions, for the high-level disinfection of instruments such as endoscopes. Chlorine is widely used for water disinfection. Therefore, the correct matching is A-2, B-3, C-4 and D-1.
- 119. Explanation:** Tribal communities are not homogeneous in their social and economic conditions. Differences are found in their geographical location, livelihood, contact with wider society, and access to education, health and other services. Some communities have become associated with the mainstream way of life, some are affected by increasing contact with towns and cities and by migration, while some still live in remote and deprived areas. Reason (R) explains this internal diversity. Hence, both A and R are true, and R is the correct explanation of A.
- 120. Explanation:** Palaeoanthropology is the scientific study of human evolution. It analyses the skeletal and fossil remains of ancient humans and other hominin groups, tools, and their associated geological and archaeological contexts. On the basis of this evidence, it reconstructs the biological origin of humans, the physical and behavioural changes that occurred over time, and the evolutionary relationships among modern humans, their possible ancestors and other extinct hominin groups. Human evolution is not a straight line, but an evolutionary tree with many branches. Therefore, option (a) is correct.
- 121. Explanation:** Winslow described public health as the science and art of preventing diseases, prolonging life, and promoting physical health and efficiency through organised community efforts. His definition includes sanitation of the environment, control of community infections, education in personal hygiene, organisation of medical and nursing services for early diagnosis and preventive treatment, and development of social machinery to ensure an adequate standard of living for the maintenance of health. Surgery for serious diseases alone is not included in this definition. Hence, option (a) is correct.
- 122. Explanation:** Turner syndrome is a condition related to the sex chromosomes. Its principal karyotype is 45, X in which there is only one complete X chromosome. This configuration is found in approximately half of the cases; in other cases, mosaicism or a partial or structural abnormality of the other sex chromosome may occur. Affected women may have short stature, reduced ovarian function and fertility-related problems. 47,XXY is associated with Klinefelter syndrome, and trisomy-21 is associated with Down syndrome. Therefore, option (b) is correct.
- 123. Explanation:** Scabies is a parasitic skin disease. It is caused by a microscopic arthropod mite called *Sarcoptes scabiei* var. *hominis*. It may cause intense itching, particularly at night, and a papular skin rash. It spreads mainly through direct and often prolonged skin-to-skin contact. *Salmonella Typhi* causes typhoid, whereas chromosomal disorders and ultraviolet radiation do not cause scabies. Therefore, option (a) is correct.
- 124. Explanation:** Biological anthropology studies the biological evolution of humans, genetics, physical and biological variation, and biosocial adaptation to different environments. In contrast, the study of the political organisation, rules, punishments, rewards and social control of stateless societies is related to political and legal anthropology under sociocultural anthropology. Hence, option (b) is not included within the field of study of biological anthropology.
- 125. Explanation:** Anthropology is the holistic study of the biological, sociocultural, archaeological, linguistic and environmental dimensions of humanity. For this purpose, it integrates the knowledge and methods of the social and biological sciences, the humanities and the physical sciences. Owing to this holistic and interdisciplinary nature, anthropology is called a 'bridge discipline'. Hence, option (a) is correct.
- 126. Explanation:** Thalassaemia is an inherited blood disorder. Owing to genetic changes, the body is unable to produce a sufficient amount of haemoglobin, which may result in anaemia. Its two main types are alpha

thalassaemia and beta thalassaemia. Depending on the severity of the disease, blood transfusions may be required; regular blood transfusions may be necessary, particularly in beta-thalassaemia major. It is neither a parasitic nor a water-borne disease, and it has no connection with the parotid gland. Therefore, option (a) is correct.

- 127. Explanation:** Article 243-W relates to the powers, authority and responsibilities of Municipalities. Under it, the Legislature of a State may, by law, Municipalities with the powers and authority necessary to enable them to function as institutions of self-government. These may include preparing plans for economic development and social justice and performing the entrusted functions and implementing schemes relating to the Twelfth Schedule.

Article 243-X relates to taxation by Municipalities and their funds. Under it, the Legislature of a State may authorise Municipalities to levy, collect and appropriate taxes, duties, tolls and fees. It may also provide for assigning specified taxes and duties collected by the State Government to Municipalities, providing grants-in-aid from the Consolidated Fund of the State, and constituting municipal funds. Hence, option (a) is correct.

- 128. Explanation:** Judicial review is the power through which the Supreme Court and the High Courts examine whether laws enacted by the Legislature and orders issued by the Executive conform to the Constitution. If a law or order violates the Constitution, Fundamental Rights or the limits of legislative competence, the court may declare it unconstitutional and void to the extent of the violation. It is an essential means of maintaining the supremacy of the Constitution, protecting Fundamental Rights and keeping the different organs of the State within constitutional limits.

- 129. Explanation:** Article 194 relates to the privileges of the State Legislature, its members and committees. These privileges are similar in nature to the privileges of Parliament under Article 105. They include freedom of speech in the House, immunity from court proceedings in respect of anything said in the House or a committee, protection of authorised publications, control over internal proceedings, and the power to take action for breach of privilege. Their objective is not personal benefit but the protection of the independence, dignity and effective functioning of the Legislature.

- 130. Explanation:** Local governments such as Gram Panchayats, Municipalities and Municipal Corporations are closest to the day-to-day problems of citizens. They have better knowledge of local conditions, resources, social structure and the actual needs of the people. Through local participation, plans can become more responsive and effective. Decentralisation increases public participation, transparency and social audit in the decision-making process. It does not mean ending the responsibilities of the Union or State Governments, but ensuring an appropriate distribution of functions and responsibilities among different levels of government.

- 131. Explanation:** The Chairman and members of the Union Public Service Commission are appointed by the President. Their term of office is six years or until they attain the age of 65 years, whichever is earlier. For the State and Joint State Public Service Commissions, the age limit is stated to be 62 years. The Union Public Service Commission submits its annual report to the President, and the President causes it to be laid before both Houses of Parliament along with an

explanatory memorandum. According to Article 322, the expenditure of the Commission is charged on the Consolidated Fund of India.

- 132. Explanation:** Article 33 empowers Parliament to restrict or abrogate, to the necessary extent, the rights conferred by Part III in their application to members of the Armed Forces, forces charged with maintaining public order, persons employed in intelligence or counter-intelligence organisations established by the State, and persons employed in telecommunication systems associated with them. Its objective is to ensure the proper discharge of duties and the maintenance of discipline. Article 34 relates to an area where martial law has been in force. Parliament may provide legal indemnity to persons concerned for acts connected with maintaining or restoring order. It may also validate any sentence passed, punishment inflicted, forfeiture ordered or other act done under martial law. Both Articles are contained in Part III—Fundamental Rights—of the Constitution.

- 133. Explanation:** According to Article 75(3), the Union Council of Ministers is collectively responsible to the Lok Sabha. The passage of a no-confidence motion in the Lok Sabha means that the entire Council of Ministers has lost the confidence of the House. In such a situation, the entire Council of Ministers, including the Prime Minister, must resign. The Council of Ministers is not collectively responsible to the Rajya Sabha, although members of the Rajya Sabha may become Ministers. Collective responsibility is a central principle of parliamentary government.

- 134. Explanation:** According to Article 222(1), the President may, after consultation with the Chief Justice of India, transfer a Judge of one High Court to another High Court.

According to judicial interpretation, the recommendation for transfer is made by the Chief Justice of India after consultation with the four other senior-most Judges of the Supreme Court. Such a transfer should be made in the public interest and with the objective of ensuring better administration of justice throughout the country.

135. Explanation: Article 324 provides for the Election Commission. The Finance Commission is constituted by the President under Article 280. The Union and State Public Service Commissions are provided for under Article 315. Article 148 provides for the office and appointment of the Comptroller and Auditor-General of India.

136. Explanation: Article 21-A provides the Right to Free and Compulsory Education to all children between the ages of 6 and 14 years. The State is required to provide this education in such manner as may be determined by law. It was inserted by the 86th Constitution Act, 2002 and came into force on 1 April 2010. Article 21-A is contained in Part III of the Constitution; therefore, it is a Fundamental Right and not merely a non-enforceable Directive Principle of State Policy. Hence, option (d) is incorrect. It was inserted by the 86th Constitutional Amendment, not the Forty-fourth Constitutional Amendment; therefore, option (b) is also incorrect. It does not relate to the age group of 14 to 18 years or to higher education; therefore, option (a) is incorrect. The same 86th Amendment amended Article 45 to make early childhood care and education for children until they complete the age of six years a Directive Principle of State Policy and also added the related Fundamental Duty of a parent or guardian in clause (k) of Article 51-A.

137. Explanation: Article 249 confers a special constitutional power on the Rajya Sabha. If the Rajya Sabha declares, by a majority of not less than two-thirds of the members present and voting, that it is necessary or expedient to do so in the national interest, Parliament may make a law on a matter in the State List specified in the resolution. This resolution remains in force for a maximum period of one year at a time. The Rajya Sabha may extend its duration by one year at a time through the same procedure. Six months after the expiry of the resolution, a law made under Article 249 ceases to have effect to the extent that it lies outside the ordinary legislative competence of Parliament. This enabling resolution cannot be passed by the Lok Sabha, a joint sitting of both Houses, or the Legislative Assembly of any State. Therefore, the correct answer is the Rajya Sabha alone. Article 312 also confers a similar special power on the Rajya Sabha. Under it, after a resolution with two-thirds support is passed, Parliament may, by law, provide for the creation of one or more All India Services.

138. Explanation: Article 243-ZD relates to the District Planning Committee. It consolidates the plans prepared by the Panchayats and Municipalities in a district and prepares a draft development plan for the district as a whole. Article 243-ZE provides for a Metropolitan Planning Committee, which prepares a draft development plan for the metropolitan area. The objective of these committees is to coordinate rural and urban plans, resources, infrastructure, the environment and matters of common interest, so that development plans adopt a regional approach rather than remaining separate.

139. Explanation: The Periodic Labour Force Survey measures employment and unemployment over different reference periods. Its principal approaches are Usual Status and Current Weekly Status. Usual Status is based on activities during the preceding 365 days, whereas Current Weekly Status takes into account activities during the seven days preceding the date of the survey. These different reference periods help in understanding the long-term and short-term employment and unemployment situation.

140. Explanation: Unemployment is not merely a problem of an individual's income. When the capacity to work remains unutilised, national output may remain low. A decline in income may reduce household consumption and savings, which may affect capital formation. Prolonged unemployment may weaken young people's morale, skills and social trust. Widespread unemployment may also increase social tension and instability. Therefore, in a labour-abundant country such as India, employment generation is a broad policy issue linked to economic growth, social justice and the effective utilisation of human capital.

141. Explanation: According to Human Development Report, 2025 in year 2023 data in India's Human Development Index value was 0.685 and its rank was 130th among 193 countries. In 2022, India's value was 0.676 and its rank was 133rd; therefore, its rank improved by three places and its index value also improved. 0.972 is Iceland's Human Development Index value. 0.475 is India's Inequality-adjusted Human Development Index value, whereas India ranked 102nd on the Gender Inequality Index. This improvement reflects changes in the combined achievements in health, education and income.

- 142. Explanation:** In the vicious cycle of poverty, the saving capacity of households and the economy remains low because of low income. Low savings limit the resources available for investment. When investment is low, capital formation, technological improvement and production capacity do not increase, as a result of which production and income again remain low. This cycle repeats itself and poverty persists. To break it, improvements are required in productive employment, social-sector investment, education, health, agricultural productivity and infrastructure. In the question, option (b) presents the correct sequence of cause and effect.
- 143. Explanation:** The base year is the reference year against which changes over time in an economic indicator are compared, taking its prices and economic structure as the standard. The base year for Gross Domestic Product and national accounts is 2022-23. The new base year for the Index of Industrial Production is also 2022-23, whereas the year 2024 has been fixed for the Consumer Price Index.
- 144. Explanation:** The Human Development Index reflects a country's average achievements in the dimensions of health, education and income. The human development situation in South Asia is mixed. Sri Lanka, the Maldives and Bhutan have a better human development status than India. Bangladesh is jointly ranked 130th with India. Nepal, Pakistan and Afghanistan have a lower human development status than India. Therefore, option (d) is correct.
- 145. Explanation:** Regional disparity means the difference found in the levels of economic and social development of different regions. After the New Economic Policy, regions that already had better infrastructure, markets and an investment-friendly environment benefited more from the reduction in the Government's direct economic role and the growing importance of the private sector. Private investment generally moves towards places where costs are lower and the prospects of profit are higher. The lack of basic facilities in backward regions may weaken their ability to attract investment. If public investment does not compensate for this gap, regional disparity may increase. Therefore, the corrective role of the State is essential for balanced development.
- 146. Explanation:** A final good is one that is purchased for final consumption or investment. Bread, milk or cloth purchased by a household are final consumption goods, whereas a machine purchased by a producer is a final capital good for investment. Therefore, it is incorrect to regard a final good as one purchased only by households or as only a food item. A good that is completely used up in further production during the same accounting year or is purchased for resale is an intermediate good. Whether a good is final or intermediate is determined on the basis of its use.
- 147. Explanation:** Market price is the amount paid by a consumer while purchasing a good or service. It includes indirect taxes and is also affected by subsidies. The sum of the returns received by the factors of production is called factor cost. To obtain factor cost from market price, net indirect taxes (indirect taxes - subsidies) are deducted. Net indirect taxes are obtained by subtracting subsidies from indirect taxes. Therefore, market price reflects the payment made by the consumer, whereas factor cost relates to the returns received by the factors of production.
- 148. Explanation:** Employment-oriented development aims to link economic growth with broad-based employment generation. Labour-intensive industries, micro, small and medium enterprises, food processing, textiles, tourism and rural non-farm activities need to be promoted. At the same time, vocational education, digital skills, training, agricultural productivity and rural entrepreneurship are important. An increase in Gross Domestic Product alone does not automatically create adequate or quality employment. Therefore, along with an increase in production, development policy should also make the number of jobs, productivity and employability explicit objectives.
- 149. Explanation:** Dadabhai Naoroji is associated with the early estimation of poverty in India. The Y. K. Alagh Committee (1979) adopted calorie-based poverty-line norms of 2400 calories for rural areas and 2100 calories for urban areas. The Tendulkar Committee separated the poverty line from a direct calorie norm and included expenditure on food, education and health. In addition to calories, the Rangarajan Committee included protein and fat as well as broader non-food items such as clothing, housing, transport and education. Therefore, all four pairs in option (a) are correct.
- 150. Explanation:** Under the gross concept, the wear and tear of fixed capital, that is, depreciation, is included, whereas depreciation is deducted from the gross amount to obtain the net measure. Machines, buildings and equipment gradually wear out during their use in production; this wear and tear is also called consumption of fixed capital. For example, to obtain Net Domestic Product at market price, depreciation is deducted from Gross Domestic Product at market price. Indirect taxes and subsidies relate to the conversion between market price and factor cost, not to the difference between gross and net.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-4

Answer key

1. (b)	2. (a)	3. (b)	4. (d)	5. (a)	6. (a)	7. (c)	8. (a)	9. (a)	10. (a)
11. (b)	12. (a)	13. (d)	14. (a)	15. (a)	16. (b)	17. (d)	18. (a)	19. (c)	20. (b)
21. (d)	22. (b)	23. (a)	24. (c)	25. (b)	26. (a)	27. (d)	28. (c)	29. (c)	30. (c)
31. (a)	32. (a)	33. (b)	34. (d)	35. (c)	36. (b)	37. (b)	38. (c)	39. (d)	40. (c)
41. (c)	42. (b)	43. (a)	44. (c)	45. (d)	46. (d)	47. (b)	48. (a)	49. (b)	50. (b)
51. (a)	52. (a)	53. (d)	54. (b)	55. (b)	56. (d)	57. (c)	58. (a)	59. (b)	60. (b)
61. (d)	62. (c)	63. (b)	64. (a)	65. (b)	66. (c)	67. (d)	68. (b)	69. (d)	70. (d)
71. (a)	72. (c)	73. (d)	74. (c)	75. (a)	76. (a)	77. (b)	78. (b)	79. (c)	80. (d)
81. (b)	82. (a)	83. (d)	84. (d)	85. (a)	86. (c)	87. (b)	88. (d)	89. (a)	90. (d)
91. (b)	92. (b)	93. (a)	94. (a)	95. (b)	96. (b)	97. (a)	98. (b)	99. (c)	100. (b)
101. (a)	102. (d)	103. (b)	104. (c)	105. (b)	106. (c)	107. (a)	108. (c)	109. (c)	110. (b)
111. (c)	112. (c)	113. (b)	114. (c)	115. (a)	116. (d)	117. (b)	118. (a)	119. (b)	120. (a)
121. (c)	122. (b)	123. (b)	124. (b)	125. (c)	126. (c)	127. (a)	128. (d)	129. (d)	130. (b)
131. (b)	132. (b)	133. (b)	134. (c)	135. (a)	136. (b)	137. (b)	138. (a)	139. (b)	140. (c)
141. (b)	142. (a)	143. (c)	144. (a)	145. (c)	146. (c)	147. (a)	148. (d)	149. (c)	150. (c)

Explanation

1. **Explanation:** The Continental Drift Theory was propounded in 1912 by the German meteorologist Alfred Wegener. According to Wegener, approximately 20 crore years ago, all the continents were part of a vast landmass called Pangaea. The Panthalassa Ocean surrounded Pangaea. Later, Pangaea was divided into Laurasia and Gondwanaland. The hypothesis of sea-floor spreading was proposed by Harry Hess. Therefore, option (b) is correct.
2. **Explanation:** The Godavari is the longest river of Peninsular India, with a stated length of 1465 kilometres. It originates at Trimbakeshwar in Nashik. It is also called the 'Vridha Ganga' or 'Dakshin Ganga'. The Tapi originates at Multai in Betul, Madhya Pradesh. The Luni disappears into the Rann of Kachchh, and the Kosi is called the Sorrow of Bihar. Therefore, option (a) is correct.
3. **Explanation:** The Western Ghats mountain range is known as the Sahyadri in Maharashtra. It extends parallel to the western coast for approximately 1600 kilometres, from the mouth of the Tapi River in the north to Cape Kanyakumari in the south. The Anaimalai, Nilgiri and Cardamom Hills are also parts of the Western Ghats. Therefore, option (b) is correct.
4. **Explanation:** India is located in the southern part of the continent of Asia. Latitudinally, it lies in the Northern Hemisphere, and longitudinally, it is situated in the Eastern Hemisphere. Therefore, India is regarded as a major country of South Asia. Options (a), (b) and (c) incorrectly describe India's location. Hence, only option (d) fully expresses the correct geographical location of India.
5. **Explanation:** Rabi crops are sown during October–December and harvested during April–June. The major Rabi crops are wheat, barley, peas, gram and mustard etc. Light or moderate rainfall occurring in winter under the influence of western disturbances is beneficial for Rabi crops. Rice, jute, cotton and soybean are Kharif crops, whereas watermelon, muskmelon and cucumber etc. are Zaid crops. Therefore, option (a) is correct.
6. **Explanation:** In West Bengal, Assam and Odisha, three crops of rice are grown, namely—Aus, Aman and Boro. Rice is an extremely important Kharif crop of India, but in several parts of the country, it is also cultivated in other seasons depending on the season and the availability of irrigation.
7. **Explanation:** 0° latitude, that is, the Equator, and 0° longitude, that is, the Greenwich Meridian, intersect to the west of Africa in the Gulf of Guinea in the Atlantic Ocean. It is an imaginary coordinate point, not a real physical location. Therefore, the correct answer is option (c).
8. **Explanation:** The process of removing the terminal bud to prevent excessive vegetative growth in cotton is called topping. This may reduce the uncontrolled upward growth of the plant and ensure better distribution of nutrients to its reproductive parts. However, the use of a chemical called Mapecel (cycocel) can also check unwanted vegetative growth and make the plant strong, balanced and capable of producing a higher yield. The removal of fuzz from cotton seeds is called delinting. A Shirley Analyser is used to detect trash in the fibre, whereas the first picking is carried out after the dew has dried.
9. **Explanation:** Marketable surplus is the quantity that a farmer has left for sale after meeting the requirements of family consumption, seed, animal fodder and payments to labourers. It may be understood by subtracting total requirements from total production. In contrast, marketed surplus is the actual quantity that the farmer sells in the market. In a distress sale, small and marginal farmers sell more of their crop than is surplus to their own requirements because of their cash needs, as a result of which the marketed surplus becomes greater than the marketable surplus.
10. **Explanation:** A pesticide should not be sprayed against the direction of the wind, and spraying should also be avoided during strong winds. Under the current rules, the principal contents of a pesticide label are given in English and Hindi. On large packs, the instruction "Read the leaflet before use" is also provided in the relevant regional languages. Leftover pesticide or spray solution should not be discharged into a river, drain or source of drinking water. It should also not be buried arbitrarily in the ground. It should be disposed of in accordance with the product label, leaflet and authorised local arrangements. Empty pesticide containers should not be used for domestic purposes. If a pesticide enters the eyes, they should be washed with clean water for 15–20 minutes. If it comes into contact with the skin, contaminated clothes should be removed and the skin should be washed with soap and plenty of water. In the event of ingestion of a pesticide containing a petroleum-based solvent, vomiting should not be induced, and immediate medical treatments should be sought.
11. **Explanation:** Maize is highly sensitive to waterlogging. When excessive water remains in the field, its roots do not receive proper aeration, and the growth of the plants is affected. Therefore, maize should be sown along the sides of ridges so that drainage is improved and the plants remain protected from waterlogging. This technique is particularly useful in areas where water is likely to stagnate in the field because of rainfall or irrigation.
12. **Explanation:** Liberalisation means reducing unnecessary government controls and restrictions imposed on the economy. Following the economic reforms of 1991, industrial licensing was abolished in almost all industries, although certain specified industries remained exceptions. The reservation of sectors for the public sector was curtailed, thereby increasing private participation. Under trade reforms, quantitative restrictions and licensing on imports and exports were reduced, and customs duty rates were lowered. Privatisation means the partial or complete withdrawal of the government from the ownership or management of public enterprises. Globalisation means the integration of the Indian economy with the world economy, involving the promotion of foreign investment, technology and international trade. Therefore, option (a) is correct.
13. **Explanation:** The classification of economic reforms into generations is a commonly used academic classification; its time limits are not rigid. The first-generation reforms of the 1990s mainly included industrial, trade and investment liberalisation, disinvestment and financial-sector reforms. From approximately 2000–01, the second-generation reforms emphasised factor markets such as land and labour, the taxation and fiscal system, the public sector, the legal-institutional framework, infrastructure and the social sectors. In the prevalent classification, the third generation is associated with the empowerment of Panchayati Raj Institutions, decentralisation and the delivery of the benefits of development to the

grassroots level. The fourth generation is not an officially declared phase but a concept of an information-technology-enabled economy. Digital governance, digital payments and technological innovations are its modern forms. Therefore, (d) is correct.

14. **Explanation:** The e-Shram Portal is the principal measure for facilitating the registration of workers in the unorganised sector and their access to social-security schemes; therefore, A-2 is correct. The Pradhan Mantri MUDRA Yojana provides credit assistance to micro-enterprises, while Startup India provides institutional support to eligible start-ups; therefore, B-4 is correct. The Pradhan Mantri Gram Sadak Yojana is related to rural road connectivity, and the Jal Jeevan Mission is concerned with providing functional tap connections to rural households; therefore, C-3 is correct. Ration portability helps eligible beneficiaries under the National Food Security Act, particularly migrant workers, to obtain ration even after changing their location; therefore, D-1 is correct. Hence, the correct code is (a) A-2, B-4, C-3, D-1.
15. **Explanation:** Minimum Support Price provides price support to farmers. The Kisan Credit Card provides timely institutional credit for farming and allied requirements, whereas crop insurance provides financial protection against crop losses caused by natural calamities, pests and diseases. Therefore, the pair given for farmers in option (a) is correct. Measures related to the welfare and empowerment of women include women's Self-Help Groups, skill training for women, the Ujjwala Yojana and financial inclusion through Jan Dhan Account.
16. **Explanation:** Alauddin Khalji conquered Gujarat in 1299 AD. This was followed by the Ranthambore campaign in 1301 AD, in which Hammir Dev, the ruler of the Chauhan dynasty, was defeated. The Mewar or Chittor campaign took place in 1303 AD. After the victory, Chittor was renamed Khizrabad after Alauddin's son, Khizr Khan. Therefore, the correct sequence is Gujarat, Ranthambore and Chittor.
17. **Explanation:** Mughal painting reached its zenith during the reign of Jahangir, and Jahangir's reign is called the Golden Age of Painting. Ustad Mansur was a renowned painter specialising in birds and was given the title Nadir-ul-Asr. Abul Hasan was skilled in portraiture and was awarded the title Nadir-uz-Zaman.

18. **Explanation:** The Indus Civilisation was a protohistoric civilisation because its script has been discovered, but it has not yet been fully deciphered. On the basis of radiocarbon dating, the period of the Mature Indus Civilisation is considered to have extended from 2600 BCE to 1900 BCE. The third statement is incorrect because the Indus Civilisation belonged to the Bronze Age, and its people were not acquainted with iron. Therefore, only statements 1 and 2 are correct.
19. **Explanation:** Humayun founded a new city called Dinpanah in Delhi. At the Battle of Chausa in 1539 AD, Sher Khan defeated Humayun and assumed the title of Sher Shah after this victory. At the Battle of Bilgram or Kannauj in 1540 AD, Sher Shah again defeated Humayun and occupied Delhi and Agra. Humayun died in 1556 AD after falling from the stairs of the library in the Dinpanah building.
20. **Explanation:** Jalaluddin Firuz Khalji was the founder of the Khalji dynasty in India. Dr R. P. Tripathi termed his accession to power following the end of the Mamluk dynasty the 'Khalji Revolution'. He made Kilokhari, near Delhi, his capital and established the Diwan-i-Waqoof department to supervise the accounts of state expenditure. Siri is associated with Alauddin, Din-i-Ilahi was initiated by Akbar, and the Lodi dynasty was founded by Bahlol Lodi.
21. **Explanation:** The Rowlatt Act was passed on 18 March 1919 and was called the law of 'no appeal, no lawyer and no argument'. On 13 April 1919, General Dyer ordered his troops to fire on the gathering at Jallianwala Bagh in Amritsar. In protest against this incident, Rabindranath Tagore renounced his knighthood. The Kaiser-i-Hind Medal was awarded to Gandhiji in 1915.
22. **Explanation:** The War of Succession began when Shah Jahan fell ill in September 1657 and rumours of his death spread. In April 1658, the Battle of Dharmat was fought between the imperial army led by Raja Jaswant Singh on one side and Aurangzeb and Murad Bakhsh on the other, in which the imperial army was defeated. In May 1658, the Battle of Samugarh was fought between Dara Shikoh on one side and Aurangzeb and Murad Bakhsh on the other. In March 1659, the final battle of succession was fought between Dara Shikoh and Aurangzeb in the valley of Deorai near Ajmer. Therefore, option (b) is correct.
23. **Explanation:** Viscosity is the property of fluids, that is, liquids and gases, by virtue of which they resist relative motion or flow between their adjacent

layers. It is described as a type of internal friction. Generally, with an increase in temperature, the dynamic viscosity of liquids decreases, whereas the dynamic viscosity of gases increases. Its SI unit is pascal-second or newton-second per square metre. Therefore, option (a) is correct.

24. **Explanation:** Viruses are acellular, ultramicroscopic infectious particles or agents. They cannot replicate independently outside a host cell; rather, they infect a living host cell, introduce their deoxyribonucleic acid or ribonucleic acid genome into it, and use its biosynthetic machinery to produce copies of themselves. Therefore, viruses are not independent cellular organisms. Generally, they possess a DNA or RNA genome and a protein coat or capsid; some viruses also possess an outer lipid envelope. Therefore, option (c) is correct.
25. **Explanation:** Plant macronutrients are those that are required in relatively large quantities. According to the scientific classification, carbon, hydrogen, oxygen, nitrogen, phosphorus, potassium, sulphur, calcium and magnesium are macronutrients. In contrast, boron, chlorine, copper, iron, manganese, molybdenum, nickel and zinc are micronutrients. Option (b) contains only macronutrients; therefore, it is the correct answer.
26. **Explanation:** Vitamin K assists in the formation and activation of several proteins required for blood coagulation. The principal natural forms of vitamin K are phyloquinone, or vitamin K₁, and menaquinone, or vitamin K₂. In the event of its deficiency, blood takes longer to clot, and the risk of excessive bleeding may increase. Night blindness is associated with vitamin A deficiency, beriberi with vitamin B₁, that is, thiamine deficiency, and pellagra with vitamin B₃, that is, niacin deficiency. Therefore, the correct answer is option (a).
27. **Explanation:** Energy is defined as the capacity of an object to do work. It is a scalar quantity, and its SI unit is the joule. Energy has several forms, such as mechanical energy, thermal energy, light energy and sound energy. Mechanical energy provides a body with the capacity to perform mechanical work, and the total mechanical energy of an object or system is the sum of its kinetic and potential energy. According to the law of conservation of energy, the total energy of an isolated system is neither created nor destroyed; it is only transformed from one form into another. Therefore, all three statements are correct.

- 28. Explanation:** Vitamins are organic micronutrients that do not directly provide calories or energy to the body, but play an essential role in metabolic processes. On the basis of solubility, vitamins are divided into two categories. Water-soluble vitamins include B-group vitamins and vitamin C. Fat-soluble vitamins include vitamins A, D, E and K. Hence, option (c) is correct.
- 29. Explanation:** Photosynthesis is the process by which green plants, algae and cyanobacteria use light energy to produce carbohydrates or sugars from carbon dioxide/dissolved inorganic carbon and water, and release oxygen. In oxygenic photosynthesis, all the oxygen released during photosynthesis is derived from the splitting of water associated with Photosystem II, and not from carbon dioxide. Therefore, option (c) is correct.
- 30. Explanation:** The National Health Mission is the Government of India's flagship health-system strengthening programme. It comprises two sub-missions—the National Rural Health Mission and the National Urban Health Mission. Therefore, it is not confined solely to rural or solely to urban areas. Its broader objective is to achieve universal access to equitable, affordable and quality healthcare services and to make the services accountable and responsive to people's needs. Hence, option (c) is correct.
- 31. Explanation:** In community mobilisation, while determining the strategy, appropriate activities and communication media are selected according to the target community, the objectives of the campaign, people's access and their preferences. Rallies, meetings, public-awareness activities, social media and cultural programmes help in reaching the community and increasing participation. Presenting the message in the local language makes it clearer and more relevant. Reliance solely on silence, punitive orders or confidential correspondence is not consistent with a participatory and multimedia approach. Hence, option (a) is correct.
- 32. Explanation:** In resource mobilisation, relationship-building forms the basis of long-term cooperation. Resource mobilisation is not merely a process of obtaining assistance once, but a process of maintaining ongoing partnerships with donors, the community and collaborating institutions. Regular two-way communication, trust, transparency and accountability strengthen relationships and increase the likelihood of future cooperation. Therefore, both A and R are correct, and R is the correct explanation of A. Hence, option (a) is correct.
- 33. Explanation:** Behaviour Change Communication is a planned and target-group-centred communication process. Its objective is not merely to provide information, but to motivate people to adopt and maintain desirable and healthy behaviours by bringing about favourable changes in knowledge and attitudes. It involves understanding people's needs, perceptions and behavioural barriers and using appropriate messages, media and methods of communication. Information or posters may be used as tools, but they do not, by themselves, constitute the complete process of Behaviour Change Communication. Hence, option (b) is correct.
- 34. Explanation:** In the Part-III of the Constitution of India relating to Fundamental Rights, Article 12 defines the term 'State'. It includes the Government and Parliament of India, the Government and Legislature of each State, and all local and other authorities within the territory of India or under the control of the Government of India. This definition is particularly important because, in the event of a violation of Fundamental Rights, constitutional remedies may be sought against these institutions. A wholly private family institution is not included within the definition of 'State' given in Article 12.
- 35. Explanation:** Article 15 generally prohibits discrimination on the grounds of religion, race, caste, sex or place of birth. At the same time, it also provides certain important exceptions. Under Article 15(3), the State may make special provisions for women and children. Articles 15(4) and 15(5) permit special provisions for socially and educationally backward classes, Scheduled Castes and Scheduled Tribes. Similarly, Article 15(6) relates to special provisions for Economically Weaker Sections. Hence, option (c) is correct.
- 36. Explanation:** Article 25 grants all persons freedom of conscience and the right freely to profess, practise and propagate religion. This right is not absolute, but is subject to public order, morality, health and the other provisions of Part III of the Indian Constitution. The State may regulate economic, financial, political or other secular activities associated with religious practice. It may also enact laws for social welfare and reform. The wearing and carrying of kirpans by Sikhs is also regarded as falling within this right. Hence, option (b) is correct.
- 37. Explanation:** Article 19 applies only to citizens and grants them six types of freedoms. These include freedom of speech and expression, freedom to assemble peacefully and without arms, freedom to form associations or organisations, freedom to move freely throughout the territory of India, freedom to reside and settle in any part of India, and freedom to practise any profession or carry on any trade or business. Through judicial interpretation, freedom of the press and the right to information have also been regarded as being associated with freedom of speech and expression. Hence, option (b) is correct.
- 38. Explanation:** The Indian Constitution is neither completely rigid nor completely flexible; therefore, it is described as a blend of the two. Some of its provisions can be amended by a simple majority, in the same manner as an ordinary law. These include the formation of new States and changes in the boundaries or names of States. On the other hand, amendments to provisions relating to Fundamental Rights, Centre-State relations, the powers of the judiciary and the election of the President require a special majority. In certain cases, ratification by half of the States is also required along with a special majority. Article 368 relates to the procedure for amendment of the Constitution.
- 39. Explanation:** All three statements are correct. Under the Bharat Industrial Development Scheme ('BHAVYA'), 100 industrial parks will be established over the next 6 years—50 in the first phase—for which NICDC is the nodal agency, and financial assistance amounting to ₹33,660 crore has been provided for.
- 40. Explanation:** This museum was privately established by A. Sivaraman. He had worked as an artist-modeller at Government Medical College, Thiruvananthapuram.
- 41. Explanation:** Both statements are correct. Red Balloon Aerospace launched the country's first indigenous super-pressure balloon from Indira Gandhi Stadium. It reached an altitude of 25 km and has the capacity to remain aloft for 24 hours.
- 42. Explanation:** The author of the book "India's First Olympic Gold" is the renowned hockey historian K. Arumugam. The book was released by P. T. Usha. It is based on the Indian hockey team's journey to its first gold medal at the 1928 Amsterdam Olympics.

43. **Explanation:** GLA University, located in Mathura, has become the country's first Microsoft GenAI campus. It has partnered with Microsoft and Google Cloud for the development of AI and cloud technology.

44. **Explanation:** Both statements are true. President Droupadi Murmu has appointed Justice Meenakshi Madan Rai, a Judge of the Sikkim High Court, as the Chief Justice of the Patna High Court.

45. **Explanation:** $x^2 - 8x - 1 = 0$

$$x - \frac{1}{x} = 8$$

$$x^2 + \frac{1}{x^2} = (8)^2 + 2 = 66$$

46. **Explanation:** The numbers divisible by 8 between 2000 and 2020 are 2008 and 2016.

Therefore, there are 2 numbers between 2000 and 2020 that are divisible by 8.

47. **Explanation:** Given—

Surface area of the cube = 5046 cm^2

$$6 \times (\text{side})^2 = 5046$$

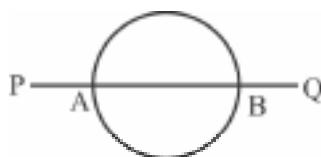
$$(\text{side})^2 = 841$$

$$\text{Side} = 29 \text{ cm}$$

$$\text{Volume of the cube} = (\text{side})^3$$

$$= (29)^3 = 24389 \text{ cm}^3$$

48. **Explanation:**



If a chord is extended indefinitely at both ends, the resulting line is called a secant line.

Clearly, PQ is a secant line.

49. **Explanation:** The largest 5-digit number = 99999

$$47 \overline{) 99999} \quad 2127$$

$$\underline{94}$$

$$59$$

$$\underline{47}$$

$$129$$

$$\underline{94}$$

$$359$$

$$\underline{329}$$

$$\underline{30}$$

∴ The largest 5-digit number divisible by 47

$$= 99999 - 30 = 99969$$

50. **Explanation:** If any three points are given in a plane, a circle need not always pass through all three points. Therefore, the statement given in option (b) is not true of a circle, whereas all the other statements are true of a circle.

51. **Explanation:** According to the functionalist sociologist Talcott Parsons, the order and continuity of society depend on members performing their respective prescribed social roles. Illness prevents an individual from carrying out daily activities, doing their job and fulfilling family responsibilities; therefore, it is regarded as a deviation from institutional role expectations. Hence, Assertion (A) is true. Since this deviation makes the individual temporarily unable to work, society grants certain special exemptions under the 'sick role'. Hence, Reason (R) is also true and correctly explains Assertion (A).

52. **Explanation:** The Y. K. Alagh Task Force (1979), constituted for official poverty estimation in India, prescribed the criterion of minimum nutritional requirements (rural: 2400 calories; urban: 2100 calories) (A-2). The Lakdawala Committee (1993) linked state-specific poverty lines to the CPI-AL and CPI-IW indices (B-1). The Tendulkar Committee (2009) adopted consumption expenditure, including health and education, in place of calorie intake, along with an all-India reference basket (C-3). The C. Rangarajan Committee (2014) again prescribed a new expenditure norm based on combined nutritional standards for calories, protein and fat (D-4).

53. **Explanation:** Ajzen and Fishbein's Theory of Reasoned Action held that behaviour was driven solely by intention. However, in 1985, Icek Ajzen realised that, despite intending to do so, an individual may sometimes be unable to perform an action because of external constraints. He therefore added 'perceived behavioural control', which indicates how capable or helpless an individual feels in performing an action. If an individual believes that changing the behaviour is easy, their intention is translated into behaviour more effectively. Hence, all three statements are true.

54. **Explanation:** On the basis of the Whitehall studies conducted on British civil servants, Michael Marmot proposed the concepts of 'Status Syndrome' and 'Social Gradient'. This theory explains that health inequality is not limited to those living below the poverty line; rather, it follows a social gradient throughout society. The health status of an individual at any particular level of the socio-economic hierarchy is better than that of an individual at a lower level and slightly worse than that of an individual at a higher level. In other words, health improves consistently with each step up the hierarchy.

55. **Explanation:** The holistic concept of health is not limited only to the treatment of disease or the destruction of germs, as in the biomedical model. It regards the human being as a whole and combines three perspectives: (1) the biomedical perspective (physical aspect), (2) the ecological perspective (balance between human beings and their environment), and (3) the psychosocial perspective (mental peace and the family and social environment). According to the holistic concept, attaining complete health requires not only the treatment of disease but also health protection, environmental improvement and health promotion.

56. **Explanation:** In sociological and public-health studies, support received from social networks is mainly classified into three categories: (1) instrumental support—which involves the provision of money, services or material goods; (2) emotional support—which involves providing consolation, love and moral support; and (3) informational support—which involves providing guidance regarding health, education and the resolution of problems. There is no category of social support called 'biological support', because social networks do not directly control cellular heredity.

57. **Explanation:** The National Rural Health Mission (NRHM) was launched on 12 April 2005. Its objective is to provide affordable, accessible and high-quality primary healthcare to rural and disadvantaged sections. The Mission is not limited merely to hospitals; rather, it emphasises increasing community participation through 'ASHA' workers and addressing the social determinants of health—such as drinking water, sanitation, nutrition, women's education and hygiene—through coordination among different departments. Hence, the statement given in option (c) is false.

58. **Explanation:** In sociology, 'Cultural Food' refers to distinctive food items associated with the identity of a geographical or tribal group, such as specific dishes, which are linked to festivals or customs. In contrast, 'food culture' is a broader concept encompassing the entire range of food-related behaviour in a society, including food production, culinary systems, taboos, serving etiquette and social patterns of consumption. Both are closely related to cultural identity; therefore, statement 3 is false, whereas statements 1 and 2 are entirely true.

- 59. Explanation:** The Knowledge–Attitude–Behaviour (KAB) Model explains that possessing health-related information/knowledge is the first step towards behaviour change, but this alone is not sufficient. Knowledge is not translated into behaviour unless the individual's attitude and socio-cultural beliefs are compatible with that knowledge. For example, despite knowing that smoking causes cancer, many people are unable to give up tobacco because of personal stress, peer pressure or habits. Hence, attitude modification, along with knowledge, is also necessary for behaviour change.
- 60. Explanation:** When a serious or undesirable illness is diagnosed, 'denial' develops as a psychological defence mechanism. In this state, the individual refuses to acknowledge the existence of the illness or its symptoms in order to avoid psychological fear and trauma. The individual believes that the report is incorrect or that there is no problem. This unhealthy attitude often causes a delay in consulting a doctor or beginning treatment, as a result of which the disease becomes more severe.
- 61. Explanation:** Physical health refers to the harmonious functioning of the body's biological systems, organs and cellular structures. Its biological signs include bright eyes, strong muscles, clean skin, appropriate weight for age/height, a healthy appetite, regular digestion and sound sleep. In contrast, the 'fear of social stigma' is a psychosocial or socio-cultural aspect associated with society's outlook; it is not a direct biological sign of physical health.
- 62. Explanation:** The functionalist perspective, as represented by the theories of Durkheim and Parsons, compares society to a living organism. Just as the different organs of the body, such as the heart and lungs, work together to keep an individual alive, institutions such as family, education, religion, the state and medicine work together to maintain equilibrium and stability in society (statements 1 and 3 are true). It does not regard society merely as a market for economic gain or merely as an arena of conflict; hence, statement 2 is false.
- 63. Explanation:** Modern psychology is not merely the study of the "mind" or the "soul". It is the scientific study of mental processes, experiences and behaviour in different contexts. Hence, statement 1 is false. Psychology understands an individual's behaviour, experiences and mental processes in relation to their biological bases and the socio-cultural and physical environment. Therefore, statement 2 is true.
- 64. Explanation:** Behaviour may include overt as well as internal/covert actions and responses. Overt behaviour can be observed or perceived by an external observer, whereas covert responses are not directly visible and are understood or measured through indirect psychological methods. Psychology also studies mental processes and subjective experiences along with behaviour. Therefore, behaviour should not be restricted only to directly observable actions. Hence, option (A) is the correct choice.
- 65. Explanation:** Mental processes are an individual's internal mental activities. They are not directly visible to an external observer; they are inferred on the basis of behaviour, responses and task performance. Therefore, statement 1 is false. Attention, perception, problem-solving and decision-making are mental processes. Hence, statement 2 is true.
- 66. Explanation:** An individual's health behaviour is influenced by knowledge, beliefs, perceptions and motivation. Health education helps correct misconceptions by providing accurate and reliable information. This enables the individual to understand health-related risks and benefits better and increases the likelihood of adopting positive behaviour. In the context of vaccination, appropriate information can reduce fear and misconceptions. However, actual behaviour is also influenced by social and practical circumstances.
- 67. Explanation:** Psychology helps a health education officer understand the beliefs, attitudes, motivations and social influences underlying people's health behaviours. On the basis of this knowledge, the impact of misconceptions and rumours can be reduced through fact-based communication, and counselling services can be made more empathetic and person-centred. It is also useful in designing health communication and behaviour change programmes according to the needs of the community. Hence, statements 1, 2 and 3 are all correct.
- 68. Explanation:** The classroom is a natural and real setting for students' behaviour. In this situation, the researcher is observing behaviour without controlling or manipulating any factor; therefore, it is naturalistic observation. At the same time, the researcher does not participate in the students' activities and observes only as an external observer; therefore, it is also non-participant observation. Hence, the correct answer is naturalistic and non-participant observation.
- 69. Explanation:** The major goals of psychology are to describe, explain and predict behaviour and mental processes, and to control and modify behaviour as required. Psychological knowledge is also used to solve practical problems and promote human welfare. Psychology is not limited to overt behaviour, nor does it aim to eliminate all internal thoughts or mental processes. Hence, option (d) is the correct answer.
- 70. Explanation:** Psychological tests are used to assess intelligence, personality, attitudes and symptoms related to mental health. Test scores should be sufficiently reliable, and validity evidence should be available to support their intended interpretation and use. The language, content, norms and administration of the test should also be appropriate to the cultural and linguistic background of the target population. Hence, all three given standards are necessary.
- 71. Explanation:** A case study involves a detailed and intensive study of a specific unit, such as an individual, group or community. Information may be collected through various methods, such as interviews, observation and psychological tests. It is useful for understanding the personal, psychological, social and economic factors associated with complex problems. However, findings from a limited number of cases cannot easily be generalised to society as a whole. Therefore, statements 1 and 2 are correct, whereas statement 3 is false.
- 72. Explanation:** In the experimental method, the researcher systematically manipulates one or more independent variables and measures their effects on the dependent variable. At the same time, an attempt is made to control other relevant extraneous variables. Therefore, this method is the most appropriate for the scientific study of cause-and-effect relationships. The correlational method indicates relationships among variables, whereas case studies and surveys mainly provide in-depth or descriptive information; they do not, by themselves, establish cause-and-effect relationships.
- 73. Explanation:** The first psychology laboratory at the University of Calcutta was established in 1915, and the first Department of Psychology was established in 1916. N. N. Sengupta was influenced by Wundt's experimental tradition.

Later, psychology also began to be applied in fields outside universities, such as management and defence services. The widespread expansion of psychology departments in universities took place after Independence and continued until the end of the 1960s, not during the 1940s. Therefore, option (d) is not correctly matched.

74. **Explanation:** The book 'Psychology in a Third World Country: The Indian Experience' by the Indian psychologist Durganand Sinha was published in 1986. It presented the development of modern psychology as a social science in India in four stages—the stage up to Independence, expansion up to the 1960s, problem-oriented research after 1960, and indigenisation from the late 1970s. Therefore, option (c) is correct.
75. **Explanation:** Values that are accepted globally, transcending personal, geographical and cultural boundaries, are called universal human values, such as truth, compassion, impartiality, transparency and social responsibility. Therefore, Assertion (A) is true. These values are not bound by the immediate preferences of any particular individual or group or by local rules; rather, they are universally and timelessly desirable for the welfare of humanity as a whole and for peaceful coexistence. Therefore, Reason (R) is also true, and it provides the correct and logical explanation of Assertion (A).
76. **Explanation:** According to the World Health Organization, health is not merely the absence of disease or infirmity, but a state of complete physical, mental and social well-being. In this question, illness refers to an individual's personal or subjective experience of feeling fatigued, in pain, uneasy or unwell. Sickness represents the socio-cultural dimension of being ill; in the given matching, it is associated with the negative social perception or stigma attached to illness. Disease is an abnormality in the structure or functioning of the body or mind that is identified through medical or clinical assessment. Therefore, the correct matching is A-4, B-1, C-2, D-3.
77. **Explanation:** According to cognitive dissonance theory, when an individual acts contrary to their thoughts and there is little external justification, they change their attitude to reduce the dissonance; this is called 'forced compliance' (Statement 1 is true). Under 'effort justification', an individual regards an outcome obtained through considerable difficulty as more important (Statement 3 is true). However, in Post-Decisional

Dissonance, the individual exaggerates the merits of the chosen alternative and highlights the shortcomings of the rejected alternative so that the decision appears correct. Therefore, Statement 2 is false.

78. **Explanation:** Heider's balance theory analyses the relationships among a person (P), another person (O) and an attitude object (X). When the mathematical product of these three relationships is positive, as in 'a friend's friend is my friend', the situation remains balanced. However, when the product is negative, as in 'a friend's friend is my enemy', psychological imbalance and tension arise in the individual. To avoid this discomfort, the individual makes the necessary changes in their attitude or relationships and re-establishes balance.
79. **Explanation:** Unconscious social control is the process that becomes so deeply embedded in an individual's unconscious mind and habits through socialisation that the individual automatically follows social norms without any special conscious effort or reasoning. Language, modes of greeting and daily habits learnt from childhood are direct examples of this. In contrast, punishment by a court is formal control, while deliberately following rules or acting to obtain a reward falls under conscious social control.
80. **Explanation:** Geographical factors are major drivers of social change. Disasters such as earthquakes, floods and droughts destroy infrastructure and disrupt the social fabric. Their most devastating effects fall upon poor and marginalised sections, thereby increasing inequality. Large dams and deforestation create displacement and resource conflicts. Modern technology has certainly improved disaster management, but the social and economic effects of such disasters can never be reduced to zero. Therefore, option (d) is false.
81. **Explanation:** The final stage of the counselling process, 'termination and evaluation', is highly sensitive. It does not merely involve ending contact; rather, the goals achieved are reviewed and a plan is prepared to maintain the acquired skills in the future. During this stage, the counsellee may experience a sense of separation; therefore, the termination stage should be carefully planned. Evaluation involves an objective assessment of all three aspects: the final outcomes of counselling, the effectiveness of the techniques used, and the counsellor's own professional skills and behaviour.

82. **Explanation:** Perez regarded counselling as an interactive process between an individual seeking assistance and a trained counsellor. Pepinsky and Pepinsky defined it as a professional interaction undertaken with the objective of bringing about positive behavioural change. According to Patterson, it is an interpersonal process that uses psychological knowledge to improve mental health. By contrast, in person-centred counselling, Carl Rogers emphasised providing a safe environment for the acceptance of suppressed experiences and the integration of the 'self'.

83. **Explanation:** In social psychology, intergroup relations are understood through three components of the A-B-C model. A stereotype is a generalised image or belief formed in the mind about the members of a group; therefore, it is the cognitive component. Prejudice is a feeling of hatred or dislike towards that group without any rational basis, and is therefore the affective component. When the same prejudice is reflected in behaviour and results in biased treatment, it is called discrimination, which is the behavioural component. Therefore, all three statements are true.

84. **Explanation:** Communication is a two-way process that is not completed merely by sending a message; rather, it is completed when the receiver understands the correct meaning and provides appropriate feedback. Congruence between the sender's words and actions determines the credibility of the message. Being a skilled listener is a prerequisite for effective communication. Effective communication does not merely involve the exchange of immediate information; it also establishes trust between the sender and the receiver and strengthens future relationships. Therefore, option (d) is true.

85. **Explanation:** The print medium, such as newspapers, is constrained by limited page space, whereas television and radio are constrained by time; therefore, their modes of presentation differ (Statement 1 is true). In public campaigns, when a credible person or an expert delivers the message, its persuasive power and public acceptability increase (Statement 2 is true). However, audience segmentation on the basis of age, education and level of development greatly affects the impact of the message. Therefore, Statement 3 is false.

- 86. Explanation:** Public opinion is the considered opinion of the majority of people in society on a public issue, which constitutes the principal basis of policy-making and social control in a democratic system of government. Customs are not written laws; rather, they are unwritten, informal folkways handed down from generation to generation. Propaganda/Publicity is used not only in business but also on a large scale to bring about behavioural change in relation to public health, sanitation and social reforms. Therefore, option (c) is true.
- 87. Explanation:** The period of the 'first 1,000 days' extends from the moment of conception until the child reaches two years of age (270 days of pregnancy + 365 days of the first year + 365 days of the second year = 1,000 days), and not merely from birth onwards (therefore, Statement 1 is false). This period is highly sensitive for brain development. Maternal nutrition, IFA supplementation, early initiation of breastfeeding immediately after birth, exclusive breastfeeding for six months—not even water—and diversified complementary feeding thereafter are essential during this period.
- 88. Explanation:** The pattern of malnutrition in Uttar Pradesh is influenced by geographical variations. In Purvanchal/Terai, infectious diseases and poverty arising from floods and waterlogging increase child malnutrition. In Bundelkhand, drought and the drinking-water crisis put pressure on food security. In western Uttar Pradesh and urban areas, a 'double burden' is visible—on the one hand, the poor population suffers from micronutrient deficiencies (hidden hunger); on the other hand, lifestyle-related obesity and diabetes are present.
- 89. Explanation:** Sickle-cell anaemia, thalassaemia and haemophilia are single-gene disorders caused by a mutation in one specific gene. Down syndrome and Turner syndrome are associated with chromosomal abnormalities. In contrast, diabetes and high blood pressure are non-communicable and multifactorial diseases involving multiple genes and environmental/lifestyle factors; they are neither infectious nor vector-borne diseases. Therefore, Statement 3 is false.
- 90. Explanation:** The CPCB's National Air Quality Index (AQI) classifies air quality into six principal categories, ranging from good to severe, on the basis of the concentrations of eight major pollutants present in the air, such as PM_{2.5}, PM₁₀, NO₂ and SO₂ etc. Its principal objective is to alert ordinary citizens to the health risks arising from air pollution. It has no direct relationship with saline seawater.
- 91. Explanation:** Health systems in developing countries are struggling with a 'double burden of disease'. On the one hand, traditional communicable diseases such as tuberculosis, dengue, diarrhoea and malaria, along with nutritional problems, persist; on the other hand, the prevalence of non-communicable diseases such as diabetes, high blood pressure, stroke and cancer is increasing rapidly because of urbanisation and lifestyle changes.
- 92. Explanation:** Stunting means 'low height-for-age' and is an indicator of 'chronic malnutrition' caused by prolonged inadequate dietary intake, recurrent infections and poor sanitation. Wasting, on the other hand, means 'low weight-for-height' and indicates 'acute malnutrition' caused by starvation or severe illness.
- 93. Explanation:** According to WHO data, non-communicable diseases account for approximately 75% of non-pandemic-related deaths worldwide each year (more than 4.3 crore deaths). Cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are the principal components. NCDs are not caused by bacteria; rather, they are associated with lifestyle factors such as unhealthy dietary habits, tobacco/alcohol consumption, physical inactivity and stress.
- 94. Explanation:** India's major public-health initiative, the 'National Health Mission' (NHM), comprises two principal sub-missions—NRHM (National Rural Health Mission) and NUHM (National Urban Health Mission). NRHM focuses on primary healthcare infrastructure and community workers in rural/remote areas, whereas NUHM delivers healthcare services to urban slums, migrants and disadvantaged urban groups.
- 95. Explanation:** The Aedes mosquito, which transmits dengue and chikungunya, lays its eggs mainly in clean, stagnant water accumulated in human-made containers such as coolers, flowerpots, tyres and uncovered tanks. Owing to rapid urbanisation and unplanned settlements, the failure to undertake source reduction in cities and towns is causing this problem to spread rapidly in urban and semi-urban areas.
- 96. Explanation:** Contamination of drinking-water sources, waterlogging and the destruction of the natural habitats of snakes after floods create immediate health risks. At such times, ORS for controlling diarrhoea, chlorine tablets for water purification, mosquito control for preventing malaria/dengue, fever surveillance for tracking infections, and anti-snake venom for treating snakebite are primary public-health requirements.
- 97. Explanation:** Working in intense sunlight and heat causes water and essential salts to be rapidly lost from the body through perspiration. This can result in dehydration, muscle cramps, strain on the kidneys and, in severe cases, 'heat stroke' due to the failure of the body's temperature-regulation mechanism, which may prove fatal. Therefore, both the Assertion and the Reason are true, and the Reason correctly explains the Assertion.
- 98. Explanation:** Tuberculosis (TB) is caused by the bacterium *Mycobacterium tuberculosis*, which primarily affects the lungs and spreads through the air when an infected person coughs or sneezes. Discontinuing the course of TB medication before its completion causes the bacteria to become resistant to the drugs, creating a serious risk of developing multidrug-resistant TB (MDR-TB).
- 99. Explanation:** According to the WHO, malnutrition does not merely mean a lack of food. It includes three major dimensions: (1) undernutrition (stunting, wasting and underweight), (2) micronutrient deficiency/hidden hunger (deficiency of vitamins or minerals), and (3) overnutrition (obesity, overweight and diet-related non-communicable diseases). Thus, an imbalance of energy or nutrients is termed malnutrition.
- 100. Explanation:** While rural hunger is generally associated with agricultural production, the monsoon and seasonal deprivation, urban hunger is a question of purchasing power and affordability. Food is abundantly available in urban markets, but slum dwellers, unorganised workers and migrants are unable to purchase nutritious food because of uncertain incomes and excessive expenditure on housing, medical treatment and transport.
- 101. Explanation:** Indian socialism is entirely different from communist or state socialism. It supports democratic values, individual liberty and a mixed economy, in which both the public and private sectors function together. Its fundamental objective is not to nationalise the means of production completely, but to reduce

the excessive economic inequality prevalent in society, promote the welfare of weaker sections and provide everyone with equal opportunities to earn a livelihood. Therefore, both the Assertion and the Reason are true, and the Reason provides the correct explanation of the Assertion.

- 102. Explanation:** Articles 14 to 18 of Part III of the Constitution make comprehensive provisions for the Right to Equality. Article 16 provides citizens with equality of opportunity in matters of appointment to any office under the State. Article 17 completely abolishes untouchability and declares its practice an offence. Article 18 abolishes titles, but exempts military distinctions (such as the Param Vir Chakra) and academic distinctions (such as Doctor/Professor) from its scope. Therefore, all the pairs are correctly matched.

- 103. Explanation:** According to Article 58, a candidate for the office of President must be a citizen of India, but it is not mandatory for the candidate to have been born in India; even being a naturalised citizen is sufficient. Therefore, Statement 1 is false. The candidate must have attained the minimum age of 35 years and must be qualified for election as a member of the Lok Sabha (Statement 2 is true). According to the Explanation to Article 58(2), the offices of President, Vice-President, Governor and Minister of the Union or of any State are not regarded as offices of profit (Statement 3 is true).

- 104. Explanation:** According to Article 169 of the Constitution of India, if the Legislative Assembly of a State passes a resolution by a majority of its total membership and by a majority of not less than two-thirds of the members present and voting (special majority), Parliament may, by an ordinary law passed by a simple majority, create or abolish the Legislative Council in that State. Such a law passed by Parliament is not deemed to be a constitutional amendment under Article 368.

- 105. Explanation:** The 74th Constitution Amendment Act, 1992 provided constitutional protection to Municipalities and added 'Part IX-A' (Articles 243P to 243ZG) and the Twelfth Schedule. The Act came into force on 1 June 1993 (Statements 1 and 3 are true). However, the Twelfth Schedule contains 18 subjects relating to the functional domain of Municipalities, not 29 subjects (the 29 subjects were added to the Eleventh Schedule for Panchayats by the Seventy-third Amendment). Therefore, Statement 2 is false.

- 106. Explanation:** The minimum ages for membership of the Lok Sabha and the Rajya Sabha are 25 and 30 years, respectively (Article 84). Under Article 99, members are required to take an oath in accordance with the Third Schedule. According to Article 104, if a person sits or votes in a House without taking the oath or without being qualified, a penalty (fine) at the rate of 500 rupees per day is imposed, not 1,000 rupees. Therefore, option (c) presents an incorrect statement.

- 107. Explanation:** Article 75(1A) was inserted by the 91st Constitution Amendment Act, 2003. It provides that the total number of Ministers in the Union Council of Ministers, including the Prime Minister, shall not exceed 15 per cent of the total membership of the Lok Sabha. For the States, Article 164(1A) prescribes a maximum of 15% of the total membership of the Legislative Assembly and a minimum of 12 Ministers, but no minimum limit has been prescribed for the Union Government.

- 108. Explanation:** Article 124(3) of the Constitution specifies the qualifications for appointment as a Judge of the Supreme Court: the person must be a citizen of India and must have served as a Judge of a High Court for 5 years, practised as an advocate of a High Court for 10 years, or be, in the opinion of the President, a distinguished jurist. The Constitution of India does not prescribe any minimum age for appointment as a Judge of the Supreme Court. Judges hold office only until the age of 65 years. Therefore, (c) is false.

- 109. Explanation:** Under Section 29A of the Representation of the People Act, 1951, the Election Commission registers political parties, grants them the status of a National Party or State Party on the basis of their electoral performance, and allocates election symbols. In cases involving disputes over election symbols or splits within political parties, it delivers decisions as a quasi-judicial body. However, the manifestos of political parties are prepared by the respective parties themselves, and the Election Commission has no involvement in their preparation.

- 110. Explanation:** According to Article 243(b) of the Constitution, Gram Sabha means a body consisting of persons registered in the electoral rolls relating to a village comprised within the area of a Panchayat at the village level. It is the most vibrant example of direct democracy. Its members are not limited to elected representatives; all adult citizens of the village whose names are entered in the electoral roll automatically become its members.

- 111. Explanation:** In Balaji Raghavan v. Union of India (1996), the Supreme Court clarified that civilian honours such as the Bharat Ratna and Padma awards are not 'titles' under Article 18. They are merely decorations for national service and outstanding contribution. However, in accordance with the basic spirit of the Constitution, recipients cannot use these honours as titles, either as prefixes or suffixes to their names.

- 112. Explanation:** According to Article 58 of the Constitution of India, it is sufficient for a candidate for the office of President merely to be a "Citizen of India", whether the person is a citizen by birth or has acquired citizenship through naturalisation/registration. In contrast, according to the Constitution of the United States of America, only a person who is a "natural-born citizen" born on American soil may contest the presidential election.

- 113. Explanation:** Sardar Patel and V. P. Menon played an extremely decisive role in the integration of the princely States, which prevented the political fragmentation of India and gave unprecedented strength to national unity. Therefore, Statement 2 is true. However, princely States such as Bhopal, Junagadh and Hyderabad initially wished to remain independent, and their merger took place considerably after 15 August 1947; for example, the formal merger of Bhopal took place on 1 June 1949. Therefore, Statement 1 is false.

- 114. Explanation:** On 8 April 1929, Bhagat Singh and Batukeshwar Dutt threw a bomb in the Assembly in protest against repressive Bills such as the Trade Disputes Bill and the Public Safety Bill. Therefore, Assertion (A) is true. Their objective was not to kill anyone, but to "make the deaf hear". For this reason, the bomb was thrown into an empty space, and instead of fleeing, the revolutionaries voluntarily courted arrest so that they could use the court to propagate revolutionary ideas. Therefore, Reason (R) is false.

- 115. Explanation:** Scholars differ in their views on the nature of the Revolt of 1857. V. D. Savarkar interpreted it in his book as India's First War of Independence. Representing the British administrative perspective, Sir John Lawrence regarded it as a Sepoy Mutiny. R. C. Majumdar held that it was neither the first, nor national, nor a war of independence. S. N. Sen, on the other hand, regarded it as a process that began with religious discontent and developed into a national struggle.

- 116. Explanation:** The States Reorganisation Act passed by Parliament came into force on 1 November 1956, along with the Seventh Constitutional Amendment. It abolished the complex classification into Parts 'A', 'B', 'C' and 'D' that had existed since Independence and reorganised the entire country into States and Union Territories. The Act made linguistic and administrative convenience the principal basis for the reorganisation of States. Therefore, option (d), which contradicts this, is false.
- 117. Explanation:** The Nagara style is the principal style of temple architecture in North India, and its extent is considered to be from the Himalayas to the Vindhya Mountains (Statement 1 is false). A major feature of this style is that temples are constructed on a high plinth and the garbhagriha is situated directly beneath the highest shikhara (Statement 2 is true). Unlike the Dravida style, Nagara-style temples generally lack grand gopurams (entrance gateways) and massive enclosure walls. Therefore, Statement 3 is also false.
- 118. Explanation:** At the Surat Session of 1907, the Congress split because of differences over the methods of Swadeshi and Boycott. At the Lahore Session of 1929, under the leadership of Jawaharlal Nehru, the historic resolution of Purna Swaraj was passed, and the Congress Working Committee subsequently decided to observe 26 January as Independence Day. Therefore, pairs 1 and 2 are correct. The Nehru Report was presented at the All Parties Conference in Lucknow in August 1928, not at the Bombay Session. Therefore, pair 3 is incorrect.
- 119. Explanation:** Turkey's (Now- Turkiye) defeat in the First World War, the Khilafat Movement began in India in opposition to the British Government's attempts to abolish the office of the Caliph and dismember the Turkish Empire. The Khilafat Committee, formed under the leadership of Shaukat Ali and Muhammad Ali—the Ali Brothers—aimed to protect the rights of the Turkish Caliph. Gandhiji supported the movement to strengthen Hindu-Muslim unity and linked it with the Non-Cooperation Movement.
- 120. Explanation:** The correct chronological order of the events is as follows: the Nehru Report was presented in August 1928 (3); at the Lahore Session, the Tricolour was hoisted at midnight on 31 December 1929 and the pledge of Purna Swaraj was taken (4); on 12 March 1930, Gandhiji began the Dandi March from Sabarmati Ashram (1); and after a journey of 24 days, the Civil Disobedience Movement was launched on 6 April 1930 by breaking the Salt Law at Dandi (2).
- 121. Explanation:** The Rigveda is the oldest Veda of the Sanatana tradition and contains metrical hymns (richas) in praise of the deities. It contains the largest number of hymns dedicated to Indra and Agni and is the principal source of information about early Vedic culture. In contrast, sacrificial rituals, ritual rules and methods described in a mixture of prose and verse constitute the principal subject matter of the Yajurveda, not the Rigveda. Therefore, option (c) presents a false statement regarding the Rigveda.
- 122. Explanation:** The Mauryan period is regarded as the starting point of Indian architecture and sculpture because, for the first time, stone began to be used extensively, systematically and skilfully in place of wood and clay during this period. Monolithic pillars, their lustrous polish, inscriptions, caves and stupas are direct evidence of the grandeur of Mauryan stone craftsmanship. This provided durability and a permanent form to Indian architecture.
- 123. Explanation:** The 'Bombay Association' was established in 1852 with the objective of awakening political consciousness in western India. Its founders and leading figures included enlightened citizens such as Jagannath Shankarseth, Dr Bhau Daji Lad and Dadabhai Naoroji. The principal function of this organisation was to bring the public problems, grievances and rights of the citizens of the Bombay Presidency to the attention of the British Government and Parliament through constitutional and lawful means.
- 124. Explanation:** In October 1789, thousands of women, distressed by famine, an acute scarcity of bread (foodgrains) and soaring prices in Paris, undertook the historic march towards the royal palace at Versailles. As a result of this popular pressure, Louis XVI and the royal family were compelled to leave Versailles and return to Paris. This shifted the centre of power towards Paris and brought the monarchy under greater pressure from revolutionary public opinion.
- 125. Explanation:** Gandhiji's Satyagraha is the non-violent resistance to injustice based on soul-force and moral strength, whose objective is to bring about a change of heart in the opponent without inflicting suffering upon them. Gandhiji clearly stated that Satyagraha is not a passive instrument of the weak or cowardly, but a weapon of the valiant who possess exceptional moral courage and discipline. Therefore, option (c) is entirely contrary to the philosophy of Satyagraha and is a false statement.
- 126. Explanation:** In protest against the brutal invasion of China by Japanese imperialism in 1937, the Congress not only called for a boycott of Japanese goods but also sent a team of doctors (Medical Mission) to China in 1938 under the leadership of Dr M. Atal. Dr Dwarkanath Kotnis was also a member of this team. This event demonstrates that the Indian freedom struggle was not confined merely to liberation within India but was also linked to international anti-imperialist solidarity.
- 127. Explanation:** Albinism is a group of inherited conditions in which the production or distribution of melanin may be reduced or impaired. In particular, oculocutaneous albinism involves a deficiency of melanin in the skin, hair and eyes. Melanin reduces damage to the skin and DNA caused by ultraviolet radiation. Therefore, its deficiency increases the risk of sun-induced damage and skin cancer. Melanin in the eyes and the developmental signals associated with it play an important role in the normal development of the fovea and visual pathways during the embryonic stage. Melanin deficiency may cause foveal hypoplasia and abnormal development of the optic pathways. Reduced visual acuity and nystagmus are also commonly found. Therefore, both Assertion (A) and Reason (R) are correct, and Reason (R) is the correct explanation of Assertion (A).
- 128. Explanation:** Karl Landsteiner made the initial observations relating to blood groups in 1900 and published their detailed description in 1901. The A and B antigens of the ABO system are carbohydrate determinants present on the surface of red blood cells. In 1927, Landsteiner and Philip Levine discovered the M and N antigens. These are components of the present MNS blood group system and are found on glycophorin-A, a transmembrane glycoprotein located in the RBC membrane. In 1940, Landsteiner and Alexander Wiener described the Rh factor. In the Rh system, the D antigen is highly immunogenic and clinically significant. Its presence makes a person RhD-positive, while its absence makes a person RhD-negative. Therefore, the correct answer is (d).

- 129. Explanation:** Phenylketonuria is an autosomal recessive inborn metabolic disorder. In this disorder, the activity of the enzyme phenylalanine hydroxylase is extremely low or absent. This impairs the conversion of phenylalanine into tyrosine. Consequently, phenylalanine and alternative metabolic products such as phenylpyruvic acid accumulate in the body. If left untreated, their accumulation may damage the developing brain and cause permanent intellectual disability, developmental delay and epileptic seizures. Therefore, all three statements are correct.
- 130. Explanation:** Lymphatic filariasis is a mosquito-borne parasitic disease caused by nematodes. Its principal causative agent is *Wuchereria bancrofti*. Its microfilariae exhibit nocturnal periodicity and are generally found in greater numbers in peripheral blood between 10 p.m. and 2 a.m. Therefore, a thick blood smear is prepared at night for the microscopic identification of microfilariae. For the FTS test for circulating *Wuchereria bancrofti* antigen, a blood sample may be collected at any time during the day or night. Adult worms live in the lymphatic vessels and impair their functioning, causing lymphoedema, elephantiasis in advanced stages and hydrocele in males. Therefore, option (b) is true.
- 131. Explanation:** Primatology is an important subfield of biological anthropology. It involves the study of the behaviour, anatomy, genetics, ecology, classification and evolution of primates, particularly non-human primates. The behaviour and ecology of living primates are studied directly, whereas conclusions about extinct primates are drawn on the basis of fossils, teeth, bones and comparative anatomy. Therefore, primatology is not confined merely to the chemical analysis of fossils. Comparing the anatomy, modes of locomotion and behaviour of non-human primates with the fossils of humans and human ancestors helps in understanding human evolution and the evolutionary background of bipedal locomotion, social behaviour and cognition. Therefore, Statement 1 is false, while Statements 2 and 3 are true.
- 132. Explanation:** In relative dating, the age of a layer, object or remnant is determined by comparing it with another layer or object. It establishes which layer was formed earlier and which was formed later. For example, if archaeological strata are undisturbed, the lower layer is generally considered older than the layer above it. This method establishes the sequence of events but does not provide their definite numerical age. In absolute or chronometric dating, scientific measurement is used to determine the numerical age or probable time range of a suitable sample. The Carbon-14 method is used for organic materials such as wood, charcoal, seeds and bones. The potassium-argon method dates volcanic rocks or ash and provides an indirect estimate of the age of archaeological remains found in association with them. Absolute dates are also generally expressed with a margin of error or probability. Therefore, the relative method mainly indicates chronological order, whereas the absolute method provides a numerical age or a year-based time range. For this reason, option (b) is correct.
- 133. Explanation:** The study of family, marriage and kinship is a major field of socio-cultural anthropology. It involves the comparative study of family structure in different societies; rules of marriage such as endogamy and exogamy; kinship terminology; patrilineal, matrilineal and bilateral systems of descent; inheritance; and roles, rights and obligations, and the division of labour within the family. Therefore, option (b) is correct. The other options are related respectively to archaeological science, forensic science and financial economics.
- 134. Explanation:** Typhoid or enteric fever is an infectious disease caused by infection with the Gram-negative bacterium *Salmonella Typhi*. It is transmitted mainly through the consumption of water or food contaminated with the faeces of an infected person or carrier, that is, through the faecal-oral route. Its major symptoms are prolonged high fever, fatigue, headache, loss of appetite and abdominal pain. In severe cases, intestinal bleeding or perforation may occur. It is neither a genetic disease nor a muscular disorder. Therefore, option (c) is false.
- 135. Explanation:** The National Health Policy, 2017 had set the targets of increasing life expectancy at birth from 67.5 years to 70 years by 2025 and achieving a Total Fertility Rate of 2.1 at the national and sub-national levels by 2025. Therefore, Statements 1 and 2 are true. The National Health Mission includes both the National Rural Health Mission and the National Urban Health Mission as sub-missions. Its major areas include health-system strengthening; reproductive, maternal, newborn, child and adolescent health; and programmes relating to communicable and non-
- communicable diseases. Therefore, Statement 3, which describes it as being confined only to the treatment of non-communicable diseases in urban areas, is false.
- 136. Explanation:** The effectiveness of behaviour change communication depends on the language, literacy, socio-cultural context and accessibility of the target group, as well as on credible local channels. Rural workers and self-help groups are appropriate channels for communicating health messages to the community, motivating people and linking them with health services. Therefore, option (b) is correct. Communication strategies for different demographic groups should be adapted according to their local needs.
- 137. Explanation:** In the Census of India, a rural area is one that has not been classified as an urban area. The basic administrative unit of a rural area is generally the revenue village. Agriculture and allied activities are the principal basis of rural livelihoods, but cottage industries, handicrafts, services and other non-agricultural activities are also found in rural areas. Family, kinship, community and Panchayats play an important role in rural social life and local decision-making. Therefore, among the given options, option (b) is correct.
- 138. Explanation:** The identification of human remains is a multidisciplinary forensic process. Skeletal elements are used to assess age, biological sex, stature and other biological characteristics. The structure of the teeth and comparison with previous dental records are also useful in identification. Preserved bone marrow, bone, teeth, blood, skin cells and suitable hair may serve as sources for DNA testing. Serological examination of bloodstains is used to determine the presence and nature of a body fluid such as blood, whereas DNA profiling may establish an association with an individual. Fingerprints are a recognised biometric method of identification, but they are not biological samples. "Psychological writing" is not standard biological evidence for the identification of human remains. Therefore, Statements 1 and 2 are correct.
- 139. Explanation:** To derive a 'Net' aggregate, depreciation is deducted from the corresponding gross aggregate. Therefore, Net Domestic Product at market price = Gross Domestic Product at market price – Depreciation. Here, the domestic scope and market-price valuation remain unchanged; only the conversion from gross to net is made. If net indirect taxes are also deducted,

Net Domestic Product at factor cost will be obtained. If net factor income from abroad is added, the domestic aggregate will be converted into the national aggregate. Each adjustment serves a different purpose.

140. **Explanation:** An open economy maintains economic relations with the rest of the world. It may involve activities such as imports and exports, foreign investment, foreign loans, capital flows, movement of labour, income received from abroad and income payments made abroad. Therefore, concepts such as net exports and net factor income from abroad become important in an open economy. Net exports are a component of the expenditure method of Gross Domestic Product, whereas Gross National Income is obtained by adding net factor income from abroad. These international flows are absent in a closed economy. In modern times, most countries of the world fall under the category of open economies because of trade and capital flows.
141. **Explanation:** Net Domestic Product at factor cost represents the net factor income generated within the domestic economic territory. To obtain the national income of normal residents, net factor income from abroad must be added to it. The result is Net National Product at factor cost, which is called national income. If factor income received from abroad is greater than factor payments made abroad, national income will be greater than domestic income; in the opposite situation, it will be lower. This adjustment converts the production-location-based domestic concept into the residence-based national concept.
142. **Explanation:** In India, poverty was measured for a long time on the basis of the consumption expenditure of households. A household whose per capita consumption expenditure was below the prescribed poverty line was considered poor. Consumption expenditure was considered useful because it indicates the actual level of consumption of a household. In the initial determination of the poverty line, consumption expenditure was linked to the calorie norm, but later methodologies also included expenditure on education, health, clothing, housing, transport and other non-food items. Thus, poverty measurement gradually became more comprehensive.
143. **Explanation:** Structural unemployment arises when changes occur in the structure of the economy, technology or the demand patterns of industries, and the skills of available workers do not match the new requirements. Modernisation of industries, technological change and

skill mismatch are its major causes. It is generally longer-term in nature because workers may require reskilling or further education. Frictional unemployment occurs during the short period of changing jobs, seasonal unemployment arises because of seasonal changes in the demand for and supply of labour during the year, and disguised unemployment occurs because of zero or very low marginal productivity.

144. **Explanation:** Gender inequality is not merely a difference in income but is the result of unequal opportunities relating to education, health, employment, access to finance, safety and property ownership. Increasing women's labour force participation, financial inclusion, skill development, safety and property rights are major measures for reducing gender inequality. These measures can improve women's economic independence, decision-making capacity and human development. Investment in women's education and health has a positive impact not only on their decision-making capacity but also on family health and nutrition and the welfare of children. Therefore, option (a) presents an inclusive approach.
145. **Explanation:** Regional disparity means that development has not occurred at the same level in all the states or regions of a country. Some regions are better placed in terms of per capita income, industrial development, education, health, electricity, roads, water and markets, whereas other regions remain backward. This difference may be associated with historical and geographical conditions, variations in economic structure and differences in the level of public investment. Regional disparity is not merely a difference in population or area, but an inequality in opportunities, productive capacity and standard of living. Targeted investment in backward regions is necessary for balanced development.
146. **Explanation:** The United Nations Development Programme began publishing the Human Development Report in 1990. The first report challenged the traditional income-centred concept of development and described the expansion of human capabilities as the ultimate objective of development. The Human Development Index became the principal indicator of this report, in which health, education and a decent standard of living are measured jointly. In 2010, some changes were made to the calculation methods of the Index and to the related indicators, but the

Human Development Report was initiated in 1990. Therefore, 1990 is an important year in the institutional development of this concept.

147. **Explanation:** Domestic income is the sum of factor incomes earned by the factors of production within the domestic economic territory of a country. It may include income earned by the factors of production owned by both residents and non-residents because it is based on the location of production. National income is the sum of factor incomes earned by the normal residents of a country within the country and from abroad; therefore, it is based on residence. National income is obtained by adding net factor income from abroad to domestic income. Thus, one concept focuses on the economic territory, while the other focuses on normal residents.
148. **Explanation:** According to the National Multidimensional Poverty Index, 2023, rural multidimensional poverty in Uttar Pradesh was 26.35 per cent, while urban multidimensional poverty was 11.57 per cent. This difference shows that the incidence of multidimensional poverty in the rural areas of Uttar Pradesh was higher than in its urban areas. Multidimensional poverty includes multiple deprivations related to health, education and standard of living. The overall multidimensional poverty ratio of Uttar Pradesh was 22.93 per cent.
149. **Explanation:** Seasonal unemployment arises when the availability of work declines during a particular season or period of the year. In agriculture, the demand for labour is high during sowing and harvesting, but work may be limited during the intervening period. Similarly, the availability of employment in sectors such as tourism, hotels and catering also varies according to the season. It differs from cyclical unemployment because cyclical unemployment is associated with a recession in the entire economy. Seasonal unemployment can be addressed through agricultural diversification, rural non-agricultural employment and the expansion of activities throughout the year.
150. **Explanation:** In June 2025, the World Bank revised the international poverty line for global poverty estimates from US\$2.15 per day in 2017 purchasing power parity terms to US\$3 per day in 2021 purchasing power parity terms. Purchasing power parity is used to make the different price structures of countries comparable. Changing the base year and revising the poverty threshold make it possible to use more up-to-date price levels for global poverty estimates.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-5

Answer key

1. (a)	2. (b)	3. (d)	4. (d)	5. (d)	6. (b)	7. (d)	8. (a)	9. (a)	10. (a)
11. (a)	12. (b)	13. (b)	14. (a)	15. (c)	16. (a)	17. (a)	18. (d)	19. (d)	20. (b)
21. (b)	22. (b)	23. (c)	24. (b)	25. (b)	26. (b)	27. (b)	28. (c)	29. (a)	30. (b)
31. (a)	32. (b)	33. (b)	34. (b)	35. (b)	36. (b)	37. (c)	38. (a)	39. (b)	40. (c)
41. (b)	42. (b)	43. (a)	44. (a)	45. (c)	46. (c)	47. (a)	48. (d)	49. (d)	50. (b)
51. (a)	52. (a)	53. (a)	54. (b)	55. (c)	56. (b)	57. (a)	58. (b)	59. (d)	60. (b)
61. (a)	62. (b)	63. (d)	64. (a)	65. (a)	66. (c)	67. (b)	68. (b)	69. (a)	70. (a)
71. (d)	72. (d)	73. (a)	74. (b)	75. (b)	76. (b)	77. (d)	78. (b)	79. (b)	80. (c)
81. (b)	82. (a)	83. (a)	84. (d)	85. (b)	86. (b)	87. (a)	88. (d)	89. (b)	90. (b)
91. (c)	92. (c)	93. (c)	94. (b)	95. (a)	96. (a)	97. (b)	98. (a)	99. (a)	100. (b)
101. (c)	102. (b)	103. (b)	104. (a)	105. (b)	106. (a)	107. (d)	108. (a)	109. (b)	110. (b)
111. (a)	112. (a)	113. (b)	114. (b)	115. (a)	116. (a)	117. (a)	118. (b)	119. (a)	120. (c)
121. (a)	122. (b)	123. (c)	124. (a)	125. (c)	126. (d)	127. (a)	128. (c)	129. (c)	130. (d)
131. (b)	132. (b)	133. (b)	134. (b)	135. (c)	136. (b)	137. (a)	138. (b)	139. (d)	140. (d)
141. (a)	142. (d)	143. (c)	144. (a)	145. (d)	146. (a)	147. (a)	148. (c)	149. (a)	150. (a)

Explanation

1. **Explanation:** Evidence related to a godibada (Dockyard), bead-making workshops and impressions of rice on pottery has been found at Lothal. It was discovered by S.R. Rao, and on the basis of its well-planned urban layout, it has been called Mini Harappa or Mini Mohenjo-daro. Evidence of a ploughed field has been found at Kalibangan in Rajasthan, not at Lothal. Therefore, only option (a) is correct.
2. **Explanation:** Megasthenes described Mauryan municipal administration as being divided into 6 committees, with 5 members in each committee. The functions of these committees were the supervision of industries and crafts, care of foreigners, maintenance of birth and death records, supervision of trade and commerce, inspection of the sale of manufactured goods, and collection of sales tax. Thus, it was an administrative arrangement comprising a total of 30 members. Therefore, option (b) is correct.
3. **Explanation:** Ashoka's inscriptions mention Pataliputra as the capital of the central authority and four major provincial capitals. Taxila was the capital of Uttarapatha, Ujjayini of Avantiratha, Tosali of Kalinga and Suvarnagiri of Dakshinapatha. In Mauryan administration, the provinces were called 'Chakras', and the administrators of the provinces were known as Kumaras or Aryaputras.
4. **Explanation:** In Indo-Persian literature, Iqta generally means a revenue grant in return for services. The credit for systematising the Iqta system in the Delhi Sultanate is given to Iltutmish. The heads of large Iqtas were called Muqti, Muqta, Nazim, Naib Sultan or Wali. During the reign of Muhammad bin Tughlaq, in some Iqtas, the Amir (military officer) and the finance officer—Wali-ul-Kharaj, who was responsible for revenue collection—were separate. Therefore, all the statements are correct.
5. **Explanation:** The founder and first ruler of the Sayyid dynasty was Khizr Khan, who accepted the suzerainty of Timur and assumed the title of Rayat-i-Ala instead of Sultan. Mubarak Shah was the first ruler of the Sayyid dynasty who declared himself Sultan and had the Khutba read in his name. Alauddin Alam Shah was the last ruler of this dynasty. Therefore, all the statements are correct.
6. **Explanation:** The sequence of Babur's major battles is as follows—the First Battle of Panipat was fought against Ibrahim Lodi on 21 April 1526. The Battle of Khanwa was fought against Rana Sanga on 17 March 1527. The Battle of Chanderi was fought against Medini Rai on 29 January 1528, and the Battle of Ghaghra was fought against Mahmud Lodi on 6 May 1529. Therefore, the correct sequence is option (b).
7. **Explanation:** The Buddha propounded the Four Noble Truths regarding worldly suffering—Dukkha, Dukkha Samudaya, Dukkha Nirodha and Dukkha Nirodha Gamini Pratipada. Under Dukkha Samudaya, craving or Trishna is described as the cause of suffering. To explain Dukkha Samudaya, Pratityasamutpada, that is, the principle of cause and effect, was expounded. Buddhism does not accept the existence of the soul, although it believes in rebirth. Therefore, the eternity of the soul is not a part of the Buddhist Four Noble Truths. The correct answer is option (d).
8. **Explanation:** Calcium and sulphur are important for the development of pods and kernels in groundnut. The application of gypsum plays an important role in pod development, oil formation and kernel development in groundnut. According to state-specific recommendations, the application of up to 400–500 kilograms of gypsum per hectare has been mentioned.
9. **Explanation:** In agricultural marketing, various utilities are created during the process of delivering the product to the final consumer. Place utility is created through transportation when a product is moved from a place of surplus to a place where it is needed. Time utility is created through storage, which makes the product available when it is required. Form utility is created through processing, and possession utility is created through the transfer of ownership from one person to another through buying and selling. Therefore, option (a) is correct.
10. **Explanation:** Atrazine is used as a pre-emergence herbicide in sole-cropped maize and sorghum. Pre-emergence application means that the herbicide is applied after sowing but before the emergence of weeds, under conditions of adequate soil moisture. When a pulse crop is grown as an intercrop with maize or sorghum, atrazine may damage the crop; therefore, a crop-safe alternative is selected in such cases. Hence, option (a) is correct.
11. **Explanation:** The shedding of flowers and young bolls affects production in cotton. To prevent this problem, the use of N.A.A. 4.5 per cent S.L., that is, alpha-naphthylacetic acid, has been recommended. It is applied at a concentration of 10–20 P.P.M. at the square formation stage in the form of three sprays at intervals of 15 days. This is an example of hormonal control. Aluminium phosphide is a fumigant used to control storage pests or rodents.
12. **Explanation:** Sustainable development means development that meets the needs of the present generation

without compromising the ability of future generations to meet their own needs. It maintains a balance among economic progress, social inclusion and environmental protection. The judicious use of natural resources, reduction in pollution, renewable energy and climate action are its important means.

- 13. Explanation:** In 1991, India was caught in a severe balance of payments crisis. The foreign exchange reserves were sufficient to finance less than two weeks of imports, and by June 1991, they had fallen to the level of approximately one week's imports. Long-standing fiscal and external imbalances, rising external debt, inflation, the increase in oil prices due to the Gulf Crisis of 1990–91, and political instability aggravated the situation. To deal with the crisis, India obtained financial assistance from the International Monetary Fund and the World Bank. Thereafter, stabilisation and structural reforms were introduced under the New Economic Policy. These reforms are broadly understood as liberalisation, privatisation and globalisation.

- 14. Explanation:** Liberalisation means freeing the economy and industry from unnecessary government controls and restrictions. Under the economic reforms initiated in 1991, industrial licensing was abolished in most industries, while exceptions remained in certain sensitive sectors. Many sectors reserved for the public sector were opened to the private sector. Trade policy was also liberalised, and import licensing and other trade restrictions were reduced. Under privatisation, the government partially or completely withdraws from the ownership or management of a public enterprise. Globalisation means the increasing integration of the Indian economy with the world economy. Under it, foreign investment, the inflow of technology and international trade were encouraged. Therefore, option (a) is correct.

- 15. Explanation:** At the time of Independence, the Indian economy was affected by colonial exploitation, widespread poverty, low agricultural productivity, food shortages, unemployment and regional imbalances. The industrial sector was limited and weak. The growth of modern industries was slow, and the capital goods industry was almost absent. Therefore, statement (c) is not correct. After Independence, efforts were made to strengthen the industrial base through planned development and the leading role of the public sector.

- 16. Explanation:** The Kerala Government has renamed the Aralam Wildlife Sanctuary, located in Kannur district, and declared it the state's first dedicated 'Aralam Butterfly Sanctuary'. The main objective of this historic decision is to promote species-specific conservation. Reason (R) correctly explains Assertion (A) because, out of the total 327 butterfly species found in Kerala, 266 species, approximately 81.3 per cent, are found within the 55-square-kilometre area of Aralam alone. Established in 1984, this sanctuary is renowned for large-scale butterfly migration, mud-puddling behaviour and rich biodiversity sustained by the Cheenkanni River.

- 17. Explanation:** On 29 July 2026, Defence Minister Rajnath Singh virtually inaugurated the country's first Department of Military Medicine at Command Hospital (Central Command), Lucknow. Tripura Gramin Bank (TGB) launched the country's first solar-powered mobile ATM van, 'TGB on Wheels'. In January 2026, the Kalpetta District Court in Wayanad, Kerala, was declared the country's first completely paperless district court. In addition, it was announced that renowned musician Ilaiyaraaja would be honoured with the Padmapani Award at the 11th Ajanta-Ellora International Film Festival in Chhatrapati Sambhajanagar for his unprecedented contribution to Indian cinema.

- 18. Explanation:** All three statements are correct. American biologist Toby Kiers has been awarded the Tyler Prize for pioneering research on mycorrhizal fungi, which is regarded as the 'Nobel Prize for the Environment'. Mycorrhizal fungi form symbiotic relationships with plant roots and provide them with water and nutrients. These underground fungal networks extend across forests, grasslands and agricultural areas worldwide. This network absorbs approximately 13 billion tonnes of carbon annually and plays an extremely important role in global climate regulation and the carbon cycle.

- 19. Explanation:** Statement (d) is incorrect. Sixteen-year-old Owen Kapoor received the Best Supporting Actor award for the widely discussed 2025 limited series 'Adolescence', while Stephen Graham received the Best Actor award for the same series. At the 83rd Golden Globe Awards ceremony held in California, Priyanka Chopra announced the name of the Best Male Actor in the drama category. At this ceremony, the film 'One Battle After Another', directed by Paul Thomas, won a total of 4 major awards, including Best Motion Picture, Best Director and Best Screenplay.

- 20. Explanation:** Statements 1 and 3 are correct, while statement 2 is incorrect. Kenjutsu is a traditional samurai art of Japanese sword fighting, not hand-to-hand combat. Jana Sena Party leader and actor Pawan Kalyan was awarded a 5th Dan Black Belt in Kenjutsu by the Golden Dragons organisation, which is extremely rare for a non-Japanese person. During the same period, he was given the title of 'Tiger of Martial Arts' and became the first Telugu person to be inducted into Japan's historic Takeda Shingen samurai lineage. This achievement connects Indian cinema with the Japanese Budo tradition.

- 21. Explanation:** India's first open-sea marine fish-farming pilot project has been launched at North Bay, Sri Vijaya Puram, in the Andaman Sea, under the joint auspices of the Union

Ministry of Earth Sciences (MoES), the National Institute of Ocean Technology (NIOT), and the Andaman and Nicobar Administration. The main objective of this project is to promote the scientific farming of marine finfish and seaweed under open-sea conditions. In accordance with the Government of India's 'Blue Economy' policy, this initiative is a revolutionary step towards the sustainable utilisation of marine resources, food security and the realisation of the potential of the coastal economy.

22. **Explanation:** The International System of Units recognises seven base quantities and seven corresponding base units. The base units are the metre for length, kilogram for mass, second for time, ampere for electric current, kelvin for thermodynamic temperature, mole for amount of substance and candela for luminous intensity. The mole was adopted as the seventh base unit in 1971. Therefore, option (b) is correct.
23. **Explanation:** Some bacteria form endospores to survive under adverse conditions. These are dormant and highly resistant structures that protect the genetic material of bacteria under adverse conditions. Pasteurisation is not sterilisation and generally does not reliably destroy bacterial endospores. For their reliable inactivation, appropriate sporicidal sterilisation, such as autoclaving at the prescribed time, temperature and pressure, is used. Therefore, option (c) is correct.
24. **Explanation:** Photosynthesis is completed in two major stages—the light reaction and the carbon-fixation/biosynthetic reaction, which is not directly light-driven but depends on ATP and NADPH. The light reaction occurs in the thylakoid membranes of the chloroplast; the grana and stroma lamellae are parts of this membrane system. During this stage, light absorption, photolysis of water, oxygen evolution, and the formation of ATP and the reduced coenzyme NADPH take place. In the Hill reaction, electrons obtained from water are transferred to a suitable electron acceptor in the presence of light, and oxygen is evolved. Therefore, option (b) is correct.
25. **Explanation:** Work is done by a force only when the force has a component in the direction of displacement. Work is a scalar quantity, and its SI unit is the joule; $1 \text{ J} = 1 \text{ N} \times \text{m}$. For a constant force, the formula for work depends on the force, displacement and the angle between them; it is expressed as $W = Fs \cos \theta$. If the angle between the force and displacement is 90° , the work done is zero. Power is the rate of doing work or the rate of transfer/conversion of energy, and its SI unit is the watt. Therefore, option (b) is correct.
26. **Explanation:** Bacteria are microscopic, unicellular and prokaryotic organisms. They do not have a nuclear membrane; therefore, option (b) is correct. They are widely found in various environments, including water, soil and air. Bacteria generally reproduce through binary fission, although their rate of growth depends on the species and environmental conditions. Under adverse conditions, some bacteria may form dormant and resistant endospores for survival; an endospore is not a reproductive structure. Therefore, the other options are incorrect.
27. **Explanation:** A magnet attracts magnetic materials such as iron, nickel and cobalt; this magnetic property is called magnetism. Magnets may be natural or may be made artificially. Lodestone is naturally magnetised magnetite and is an example of a natural magnet. Hard or carbon steel is used for permanent magnets, whereas soft iron is used for temporary magnets or as the core of electromagnets. The attractive power of a bar magnet is maximum near its poles and minimum in its middle portion. Unlike poles attract each other, whereas like poles repel each other. Therefore, option (b) is correct.
28. **Explanation:** A lens is a transparent refracting medium bounded by two surfaces, of which at least one is spherical, or by one spherical surface and one plane surface. A convex lens is thick at the centre and thin at the edges. An ordinary glass convex lens placed in air converges a parallel beam of light rays; therefore, it is called a converging lens. An ordinary glass concave lens placed in air is thin in the middle and thick at the edges, and it diverges light rays. Although an air bubble under water is convex in shape, the refractive index of air is lower than that of water; therefore, it diverges light and behaves like a concave lens. Hence, option (c) is correct.
29. **Explanation:** A major practical limitation of Behaviour Change Communication is that permanent behavioural change is generally a gradual and time-consuming process. The mere acquisition of information or knowledge does not automatically or immediately change habits. Behaviour is influenced by an individual's motivation, the beliefs of the family and community, social norms, culture, health literacy, available services and economic resources. Misinformation may also obstruct change. Therefore, option (a) is correct.
30. **Explanation:** The Pradhan Mantri Matru Vandana Yojana provides cash maternity assistance to eligible pregnant and lactating women belonging to socially and economically disadvantaged and marginalised sections. Its objectives are to improve maternal and child health and nutrition, encourage health-seeking behaviour and partially compensate for wage loss. Under Mission Shakti, Pradhan Mantri Matru Vandana Yojana 2.0 provides a total of 5,000 rupees in two instalments for the first living child. The first instalment is 3,000 rupees and the second instalment is 2,000 rupees. If the second child is a girl, 6,000 rupees is provided in a single instalment after the prescribed conditions are fulfilled. The first instalment is linked to the registration of pregnancy and the

prescribed antenatal check-ups. The second instalment is provided upon the registration of the child's birth and completion of the first cycle of immunisation up to 14 weeks of age. Therefore, option (b) is correct.

- 31. Explanation:** The major mechanisms of resource mobilisation include submitting grant proposals, organising fundraising programmes, requesting support from donors, effectively presenting the organisation's achievements and track record, building relationships with donors, conducting membership drives and developing partnerships. The organisation may also receive fees in return for technical expertise and training-related services. Through these means, financial and non-financial resources are mobilised to strengthen the organisation's capacity and the continuity of its programmes. Therefore, option (a) is correct.
- 32. Explanation:** Human resources refer to individuals and their time, labour, skills, experience and expertise that contribute to the achievement of the objectives of an organisation or programme. Employees, volunteers, experts and trained individuals are examples of human resources. Buildings and furniture are physical resources. The support of eminent persons is a moral resource, whereas reports and awareness materials are cultural resources related to knowledge and communication. Therefore, option (b) is correct.
- 33. Explanation:** Venus is described as the hottest planet in the Solar System. Although Mercury is the closest planet to the Sun, the atmosphere of Venus consists mainly of carbon dioxide, which causes a runaway greenhouse effect. For this reason, it is the hottest planet. Venus is the brightest planet visible from the Earth. Among all natural celestial bodies, it is generally the brightest natural object after the Sun and the Moon. It is called the Morning Star and the Evening Star. Therefore, option (b) is correct.

- 34. Explanation:** The descending order of the seven continents according to their area is—Asia, Africa, North America, South America, Antarctica, Europe and Australia. Asia is the largest continent in the world, whereas Australia is the smallest continent and is called the island continent. Therefore, option (b) is correct.
- 35. Explanation:** The International Date Line extends through the Pacific Ocean from the North Pole to the South Pole and also passes through the Bering Strait. It is not a straight line; it has been diverted around places such as Fiji and Kiribati so that a single country does not have two different dates. When it is crossed westwards, one day is added, and when it is crossed eastwards, one day is subtracted. Therefore, option (b) is correct.
- 36. Explanation:** The Mahi River, which originates from the Vindhya Range in Madhya Pradesh and flows through Rajasthan and Gujarat before draining into the Gulf of Khambhat, crosses the Tropic of Cancer twice.
- 37. Explanation:** According to the material, the Pir Panjal, Mahabharat, Mussoorie, Dhauladhar and Nag Tibba ranges are included in the Lesser Himalaya, also known as the Middle Himalaya or Himachal Himalaya. Among these, the Pir Panjal Range is described as the longest range of the Lesser Himalaya. The Atal Tunnel also crosses the Pir Panjal Range. Therefore, the correct answer to the question regarding the longest range of the Lesser Himalaya is option (c).
- 38. Explanation:** The Damodar Valley Project is the first multipurpose river valley project of independent India and was started in 1948. It was developed on the model of the Tennessee Valley Authority (TVA) of the United States of America. This project is associated with the Damodar River, which was called the 'Sorrow of Bengal' because of its devastating floods. Jharkhand and West Bengal benefit from it. Therefore, option (a) is correct.

- 39. Explanation:** On the basis of structural features, the 16° N parallel divides the Sahyadri/Western Ghats mountain range into the Northern and Southern Sahyadri. The highest peak of the Northern Sahyadri is Kalsubai, which has a height of 1646 metres. The highest peak of the Southern Sahyadri and the entire Sahyadri/Western Ghats mountain range is Anamudi, which has a height of 2695 metres. Therefore, the correct sequence is Kalsubai and Anamudi. Hence, option (b) is correct.
- 40. Explanation:** The original Constitution contained 7 Fundamental Rights. Subsequently, the Right to Property was removed from the list of Fundamental Rights by the 44th Constitution Amendment Act, 1978. The provisions relating to the Right to Property in Article 19(1)(f) and Article 31 were removed, and the Right to Property was made a legal right under Article 300A. At present, there are 6 Fundamental Rights. Fundamental Rights are provided in Part III of the Constitution under Articles 12 to 35.
- 41. Explanation:** According to the study material, the Legislative Assembly in Uttar Pradesh is more powerful in legislative matters. The Legislative Council may delay an ordinary Bill passed by the Legislative Assembly, that is, a Bill other than a Money Bill, for 90 days on the first occasion and 30 days on the second occasion. In the case of a Money Bill, the position of the Legislative Assembly is supreme, and the Legislative Council may delay it for only 14 days. Under Article 169, the Legislative Council is created or abolished by Parliament on the basis of a resolution passed by the State Legislative Assembly.
- 42. Explanation:** The original Constitution contained 8 Schedules, whereas at present there are 12 Schedules. The First Schedule relates to the States and Union Territories. The Fourth Schedule provides for the allocation of seats in the Rajya Sabha. The Seventh Schedule relates to the distribution of

legislative powers and includes the Union List, State List and Concurrent List. The Twelfth Schedule contains 18 subjects relating to the powers and responsibilities of Municipalities. The Eleventh Schedule contains 29 subjects relating to Panchayats.

43. **Explanation:** The framing of the Constitution of India took a total of 2 years, 11 months and 18 days. The Constituent Assembly held a total of 11 sessions, extending over 165 days. The Draft Constitution was considered for 114 days. The Constitution was adopted on 26 November 1949, and certain provisions came into force on the same day. The Constitution came fully into force on 26 January 1950. The final meeting was held on 24 January 1950, at which 284 members signed it.

44. **Explanation:** The Rajya Sabha is a permanent House and is not subject to dissolution. Its members have a term of 6 years, and as nearly as possible, one-third of its members retire every two years. Under Article 249, if the Rajya Sabha passes a resolution by a two-thirds majority of the members present and voting that a subject in the State List is of national interest, Parliament may make a law on that subject. The Rajya Sabha also has a special role in the creation of All India Services under Article 312.

45. **Explanation:** Given—
Volume of the cube = 13824 cm^3
Let the length of each edge of the cube = $a \text{ cm}$.
 $\therefore$ Volume of the cube = $(\text{edge})^3$
 $13824 = (a)^3$
 $a = \sqrt[3]{13824}$
 $a = 24 \text{ cm}$.

46. **Explanation:** Radius of the circle (r) = 48 cm .
Length of the arc (l) = 15 cm .
 $\therefore$ Area of the sector = $\frac{1}{2} l \times r$
 $= \frac{1}{2} \times 48 \times 15$
 $= 360 \text{ cm}^2$.

47. **Explanation:** The sum of three consecutive natural numbers is always divisible by three.

$$5 + 6 + 7 = 18$$

$$9 + 10 + 11 = 30$$

$$12 + 13 + 14 = 39$$

These three sums, namely 18, 30 and 39, are divisible by 3.

48. **Explanation:**

$$x^2 + \frac{1}{x^2} = 29$$

$$x - \frac{1}{x} = \sqrt{29-2} = \sqrt{27} = \pm 3\sqrt{3}$$

49. **Explanation:** All the odd numbers between 10 and 30

$$= 11, 13, 15, \dots, 29$$

$$\therefore \text{Required average} = \frac{11+29}{2} = \frac{40}{2} = 20$$

50. **Explanation:** Let the two consecutive numbers be x and $x + 2$.

According to the question,

$$x + x + 2 = 174$$

$$2x = 172$$

$$x = 86$$

Hence, the smaller number = 86

51. **Explanation:** In Sigmund Freud's psychoanalytic theory, 'Motivated Forgetting' or 'Repression' is regarded as a major mental defence mechanism. When an experience generates intense fear, guilt or stress that threatens an individual's self-esteem, the mind prevents that experience from becoming available for conscious recall. Its main purpose is to protect the individual from psychological trauma. Therefore, both Assertion (A) and Reason (R) are true, and Reason (R) provides the correct and logical explanation of Assertion (A).

52. **Explanation:** According to Ruth Benedict, heredity is the transmission of traits from parents to offspring. R. S. Woodworth included in heredity all those factors that are present in an individual at the beginning of life, that is, at the time of conception. According to Douglas and Holland, it includes structures, physical characteristics, functions and capacities received from

parents, other ancestors or the species. B. N. Jha regarded heredity as the sum total of an individual's innate traits. Therefore, the correct matching is A-1, B-2, C-3 and D-4.

53. **Explanation:** The main objective of the case study method is to conduct an in-depth historical and multidimensional study of a specific unit so that the socio-economic and psychological causes of complex behaviours, such as a TB patient repeatedly discontinuing medication, can be understood (Statements 1 and 2 are true). However, one of its major limitations is that it is based on one or very few cases; therefore, its findings cannot be 'generalised' (Generalisation) to society at large. Hence, Statement 3 is false because the findings of a limited number of case studies cannot be applied with certainty to the whole of society.

54. **Explanation:** According to Gestalt psychology, our brain perceives a visual field by distinguishing two parts—'Figure' and 'ground'. The figure is the part that becomes the focus of attention, appears distinct and is perceived as bounded, such as the large letters written on a poster; whereas the ground is the indistinct base that recedes into the background, such as the light colour of the poster. Hence, option (b) is correct.

55. **Explanation:** Substance use is a multidimensional biopsychosocial problem. During adolescence, identity crisis, peer pressure, curiosity, unemployment, family disintegration and the easy availability of drugs are the major motivating factors in the onset of addiction. In contrast, strong family and social support, positive guidance and opportunities for healthy recreation prevent an individual from turning to drugs; these are protective factors, not factors that promote addiction. Hence, option (c) presents an incorrect statement.

- 56. Explanation:** According to the studies of American psychologist George Miller, the capacity of short-term memory (STM) is limited, which he described as “The Magical Number 7 ± 2 ”, meaning that it can hold approximately 5 to 9 information units or chunks, with an average of 7, at a time. Moreover, without any rehearsal or reinforcement, information generally remains stored in it for only 20 to 30 seconds, after which it is forgotten or transferred to long-term memory. Hence, option (b) is completely true.
- 57. Explanation:** Thorndike placed a hungry cat in a puzzle box from which escape required a particular response. Initially, the cat made several random responses, such as scratching with its paws, jumping and moving around. During these attempts, the lever was accidentally pressed, the door opened and the cat obtained the food placed outside. When the experiment was repeated several times, the successful response that led to food became stronger, while the other ineffective responses gradually decreased. This learning did not occur through sudden insight but through gradual attempts and successful outcomes. According to Thorndike’s Law of Effect, a response followed by a satisfying result develops a stronger connection with the situation. Therefore, the correct sequence is 1-2-3-4.
- 58. Explanation:** Classical Conditioning Theory explains that a neutral stimulus associated with an unconditioned stimulus also begins to elicit a similar response. If a hospital or vaccination room, its sights and smells, scolding or harsh behaviour become associated with pain, these cues later evoke fear. If healthcare workers show empathy, smile and behave respectfully, a positive and trusting conditioned response towards health services develops in the patient’s mind.
- 59. Explanation:** All three of these theories of learning are pillars of psychology. Pavlov demonstrated that an association is established when two stimuli are repeatedly presented together. Skinner demonstrated that when an action is followed by a positive reward (reinforcement), that behaviour is strengthened. Bandura believed that human beings learn not only through direct experiences but also by observing and imitating others, or models, in society. Hence, all three pairs are correctly matched.
- 60. Explanation:** Mental stress affects the entire body–mind system. Its physical symptoms include an increase in heart rate and blood pressure, sweating and muscular tension due to activation of the autonomic nervous system. At the mental/cognitive level, it causes anxiety, depression, lack of concentration and faulty decision-making. At the behavioural level, a stressed person begins to resort to alcohol or drugs, becomes irritable and starts withdrawing from society (isolation). Hence, option (b) presents the correct classification.
- 61. Explanation:** Clark Hull’s Drive-Reduction Theory holds that when the body lacks a biological requirement, such as water or food, internal tension or a drive is produced, and the individual acts to reduce it. In contrast, the Incentive Theory of motivation explains that an individual does not act only because of an internal biological drive but also adopts specific behaviour by being attracted towards appealing rewards, social appreciation, money, honour or facilities available in the external environment.
- 62. Explanation:** Cognitive psychology studies mental or cognitive processes—such as attention, perception, memory, reasoning and decision-making. It is highly significant in the field of public health because it helps in understanding how an individual processes health-related information, dispels misconceptions and makes decisions regarding the treatment or prevention of a disease. Effective health education messages are prepared on this basis.
- 63. Explanation:** V. D. Savarkar, along with another associate, established ‘Mitra Mela’ in Nashik in 1899, which was reorganised as ‘Abhinav Bharat’ in 1904 (Statements 1 and 2 are correct). This organisation was a secret revolutionary society inspired by the ‘Young Italy’ movement of the Italian nationalist leader Giuseppe Mazzini (Statement 3 is correct). Its branches extended beyond Maharashtra to Central India. Hence, all three given statements are completely true.
- 64. Explanation:** Vedic literature developed in a sequential manner. The Samhitas contain collections of mantras in praise of deities. The Brahmana texts provide prose descriptions of the ritualistic and ceremonial aspects of Vedic sacrifices. The Aranyaka texts examine the esoteric philosophical and spiritual meanings of sacrifices in the context of forest life. The Upanishads, also known as ‘Vedanta’, present purely philosophical reflections on Brahman, Atman and the ultimate goal of life, namely Moksha.
- 65. Explanation:** During the First World War, the Home Rule Movement led by Bal Gangadhar Tilak and Annie Besant made the demand for self-government widespread among the Indian people (Reason (R) is correct). To pacify this public discontent and secure Indian cooperation, the Secretary of State for India, Edwin Montagu, declared on 20 August 1917 that the objective of British policy was to establish responsible government in India (Assertion (A) is correct). Hence, Reason (R) correctly explains Assertion (A).
- 66. Explanation:** The influence of the Gandhara style spread through the north-western trade routes to Central Asia, China and Korea, and was not confined merely to Sri Lanka; therefore, Statement (c) is false. The Gandhara style is also called ‘Indo-Greek’ or ‘Greco-Buddhist’ art because the Buddha was depicted with an Apollo-like physique, drapery with prominent folds and wavy hair. Its major centres were Taxila, Swat and the Peshawar Valley.

- 67. Explanation:** The square, balcony-like structure situated at the top of the main hemisphere (anda) of a stupa is called the 'harmika', a structure symbolising the abode of the gods and sacredness; hence, option (b) is correct. A vertical pole called the 'yashti' rises from the harmika, on which the 'chhatras' are supported. The railing or enclosure surrounding the stupa is called the 'vedika', whereas the gopuram is the entrance gateway of Dravidian temples in South India.
- 68. Explanation:** In 1918, despite the destruction of crops in the Kheda district of Gujarat, the British administration was collecting full land revenue from the peasants in violation of the rules of the Revenue Code. At Gandhiji's call, the peasants began a Satyagraha based on the non-payment of land revenue (option (b) is correct). Along with Mahatma Gandhi, Sardar Vallabhbhai Patel and Indulal Yagnik played major roles in it. Ultimately, the government had to yield and issued an order that land revenue should be collected only from peasants who were capable of paying it.
- 69. Explanation:** Under the leadership of Dwarkanath Tagore, the 'Landholders' Society' was formed in 1838 to protect the interests of the zamindars. In 1843, the 'Bengal British India Society' was formed through the efforts of George Thompson. In 1851, these two organisations merged to form the 'British Indian Association', whose president was Radhakanta Deb. In September 1916, Annie Besant established the 'Home Rule League' at Adyar in Madras. Hence, the matching in option (a) is correct.
- 70. Explanation:** The Kalpasutras are of four types—Shrautasutra, Grihyasutra, Dharmasutra and Shulbasutra. The Shrautasutras are concerned with the rules of large and public Vedic sacrifices; hence, option (a) is correct. The Grihyasutras are related to the daily sacrifices of household life and the 16 samskaras. The Dharmasutras describe social, moral and administrative rules/laws. The Shulbasutras are concerned with the mathematical and geometrical measurements used in the construction of sacrificial altars and are also regarded as the earliest source of Indian geometry.
- 71. Explanation:** In protest against the announcement of the Partition of Bengal by Lord Curzon in 1905, the Swadeshi Movement was formally proclaimed and the boycott resolution was adopted at the Town Hall in Calcutta on 7 August 1905. Along with the boycott of foreign goods, the Swadeshi Movement promoted indigenous textiles, banks and Swadeshi education (Statements 1 and 2 are correct). For the first time, urban middle-class women and students openly participated in picketing and protest demonstrations. Hence, all three statements are correct.
- 72. Explanation:** The presence of a large water reservoir or water tank (temple tank) within the main complex of Dravidian-style temples in South India is an essential and major architectural feature; therefore, Statement (d) is false. Dravidian-style temples have massive enclosure walls, grand entrance gateways (gopurams) and a main tower (vimana) built in the form of a stepped pyramid above the sanctum. An example is the Brihadishvara Temple at Tanjore.
- 73. Explanation:** The 16th chapter of the Shukla Yajurveda, containing a hymn in praise of Lord Rudra, is called the 'Rudradhyaya' (Statement 1 is correct). Its 40th and final chapter is the 'Ishavasya Upanishad', which expounds spirituality and Nishkama Karma (Statement 2 is correct). The Shatapatha Brahmana is associated with the 'Shukla Yajurveda'—the Madhyandina and Kanva recensions—and not with the Krishna Yajurveda; therefore, Statement 3 is false.
- 74. Explanation:** In the Estates-General convened at Versailles on 5 May 1789, according to the traditional rule, each Estate had only one vote, enabling the nobility and clergy together to defeat the Third Estate (98% of the population). The Third Estate demanded that voting be conducted on a per-head basis. When the King rejected this demand, the representatives of the Third Estate declared themselves the 'National Assembly', representing the entire nation, on 17 June 1789.
- 75. Explanation:** The most prominent feature of the Amaravati style, which developed in the Krishna-Godavari Valley under the patronage of the Satavahana and Ikshvaku rulers, is the presence of the 'Ayaka Pillars' standing on the Ayaka platforms in the four cardinal directions of its Mahachaitya; therefore, option (b) is correct. The sculptures of Amaravati were mainly made of light grey-white limestone, which has been referred to as 'Palnad Marble/Amaravati Marble' in older literature.
- 76. Explanation:** During the 18th-19th centuries, the scale of production in Europe increased enormously because of the Industrial Revolution. Industrial nations such as Britain, France and Germany required raw materials on a large scale for their factories, such as cotton, rubber and minerals, as well as new protected markets for selling finished industrial goods. This economic necessity motivated them to conquer countries in Asia and Africa and turn them into colonies, leading to the emergence of New Imperialism.
- 77. Explanation:** Bronislaw Malinowski was not a diffusionist but a major proponent of anthropological functionalism. According to his need-based functionalism, the various elements and institutions of culture fulfil the basic biological needs of human beings and the instrumental and integrative needs arising from them. In contrast, G.E. Smith and W.J. Perry were associated with British hyper-diffusionism, while Fritz Graebner was a major thinker of German culture-circle diffusionism. L.H. Morgan presented a unilinear evolutionary model comprising the three stages of savagery, barbarism and civilisation. Radcliffe-Brown was a major proponent of structural functionalism, while Franz Boas was a major proponent of historical particularism. Therefore, option (d) is the correct answer.

- 78. Explanation:** Bipedal locomotion means standing upright and walking on two legs. After bipedal locomotion developed among human ancestors, the need to use the upper limbs continuously to support body weight and for terrestrial locomotion decreased. Consequently, the hands became available for carrying food, infants and objects and for holding and operating tools. Later, the opposable position of the thumb, better control of the fingers and changes in the bones of the hand made the precision grip more effective. Reason (R) mentions other types of physical adaptations associated with bipedal locomotion. The lumbar curvature of the spine helps keep the trunk upright and maintain the body's centre of gravity above the feet. Similarly, the arches of the feet support the body's weight, reduce the impact experienced while walking and provide an effective base for the foot. Thus, both the Assertion and the Reason are correct. Nevertheless, lumbar curvature and the arches of the feet do not directly explain the freeing of the hands and the use of tools. Therefore, the correct answer is option (b).
- 79. Explanation:** Here, descent does not mean the inheritance of genetic traits but the reckoning of socially recognised descent relationships. Every society has social rules for determining the lineage or descent group of which an individual is considered a member. Therefore, descent cannot be confined solely to biological blood relationships. Adoptive or socially recognised parent-child relationships may also form the basis of descent-group membership. Therefore, statement 1 is incorrect. Collateral kin are relatives who are related through a common ancestor but do not fall within one another's direct line of ascent or descent. For example, siblings, uncle and nephew, and cousins are collateral kin. Therefore, statement 2 is correct. Fictive kinship is formed through social recognition, religious tradition, adoption or close social relationships rather than through blood or marriage. Ritual brothers, godparents and adoptive relations are its major examples. Therefore, statement 3 is also correct. Hence, the correct answer is (b): 2 and 3 only.
- 80. Explanation:** According to the Hardy-Weinberg equilibrium, under ideal conditions, the allele and genotype frequencies of a population remain constant from generation to generation. For this, the population must be very large, mating must be random, and mutation, gene flow and natural selection must be absent. Therefore, options (a), (b) and (d) are necessary conditions. Option (c) states that the rates of natural selection and mutation are extremely high, whereas these factors affect genetic equilibrium rather than maintain it. Therefore, option (c) is the correct answer.
- 81. Explanation:** Potlatch is a ceremonial feast and gift-distribution tradition of the Kwakwaka'wakw, Haida and other Indigenous communities of the Pacific Northwest Coast of North America. In it, the host chief, family or descent group provides food and gifts to invited guests. As witnesses, the guests publicly affirm the family's prestige, rank, names and hereditary rights. In some historical competitive forms, breaking or destroying valuable objects, particularly copper plates, was also a means of displaying wealth and prestige. Therefore, option (b) is correct.
- 82. Explanation:** *Australopithecus afarensis*, such as 'Lucy', lived in East Africa approximately 3.9 to 2.9 million years ago. This was followed by *Homo erectus* (approximately 1.9 million to 1,10,000 years ago), which was the first to use fire and migrate out of Africa. *Homo neanderthalensis* (approximately 4,00,000 to 40,000 years ago) subsequently appeared in Europe and Central Asia and performed complex burial rituals. Finally, modern humans, that is, *Homo sapiens*, emerged approximately 3,00,000 years ago and have continued to the present. Therefore, the correct chronological sequence of human evolution is option (a).
- 83. Explanation:** There are four criteria for the identification of PVTGs: a pre-agricultural level of technology, a stagnant/declining population, extremely low literacy and a subsistence-level economy. Professor L.P. Vidyarthi studied the Paharia tribe and propounded the theory of the 'Nature-Man-Spirit Complex'. Statement 3 is incorrect because Indian tribes are associated not only with the Dravidian language family but also with the Austro-Asiatic (such as Santali), Tibeto-Burman (tribes of the North-East) and Indo-Aryan language families. Therefore, statements 1 and 2 are correct, while statement 3 is incorrect.
- 84. Explanation:** Karl Polanyi identified three principal forms of economic integration—reciprocity, redistribution and market exchange. Reciprocity is based on mutual giving and receiving between symmetrical social groups. Under redistribution, goods are collected at a central point or institution and are then redistributed from there. Market exchange is associated with buying and selling in price-making markets. Monetary capitalism is not part of this classification. Therefore, option (d) is correct.
- 85. Explanation:** The Sapir-Whorf hypothesis is associated with 'linguistic relativity'. According to it, language is not merely a medium for expressing thoughts but may also influence certain aspects of an individual's attention, classification, perception and worldview. Its strong form regards language as a determinant of thought, whereas according to the more widely accepted weak form, language influences thought but does not determine it completely. The classification of colours and the understanding of spatial directions are common examples of this. Therefore, option (b) is the most appropriate.

- 86. Explanation:** Participant observation is a major method of fieldwork, particularly in social and cultural anthropology. Bronislaw Malinowski is principally credited with establishing long-term, direct and systematic fieldwork as a standard practice. He lived among the Trobriand Islanders and studied their language, daily life, customs and perspectives. In this method, the researcher participates in community life while collecting data through observation, conversation and field notes. Therefore, it is not confined solely to questionnaires sent by post or library materials, and the researcher does not remain completely separate from the community.
- 87. Explanation:** The concept of cultural ecology was developed by the American anthropologist Julian Steward. It studies how a society adapts to its local environment through its subsistence technology, modes of production and behavioural patterns. According to Steward, the 'cultural core' consists of those cultural elements that are most closely associated with subsistence activities and economic arrangements. Related social, political and religious patterns may also be included in it. It is not rigid environmental determinism but the study of the empirical relationship among environment, technology and culture. Clifford Geertz is associated with interpretive anthropology, Ruth Benedict with patterns of culture and Margaret Mead with culture and personality studies.
- 88. Explanation:** E.B. Tylor regarded animism as the earliest and most fundamental form of religion. According to him, animism is the belief in souls and other spiritual beings. This belief developed from attempts to explain phenomena such as life and death, sleep and dreams, trance and visions. R.R. Marett criticised and modified Tylor's theory by emphasising a pre-animistic stage. According to him, before developing a clear concept of the soul, human beings experienced mysterious supernatural power and awe. 'Mana' was regarded as a major example of such power. Therefore, option (d) is correct.
- 89. Explanation:** Environmental degradation means a decline in the quality of air, water, soil and other natural resources, along with the degradation of ecosystems and biodiversity. It may result from pollution, deforestation, unplanned urbanisation, polluting industrialisation and the overexploitation of natural resources. When resources are used beyond their regenerative capacity and waste is discharged beyond the environment's absorptive capacity, ecological balance is disturbed. Therefore, option (b) is correct.
- 90. Explanation:** According to the Food and Agriculture Organization (FAO), food security exists when all people, at all times, have physical, social and economic access to sufficient, safe, nutritious and culturally acceptable food that meets their dietary needs for an active and healthy life. It includes four main pillars: food availability, access, utilisation and stability. Merely producing or maintaining stocks of foodgrains does not guarantee food security unless the food is within the purchasing power of even the poorest person.
- 91. Explanation:** The regional health profile of Uttar Pradesh depends on its geographical diversity. The Terai and Purvanchal regions are highly vulnerable to Japanese encephalitis (JE), acute encephalitis syndrome (AES), dengue, malaria and water-borne enteric diseases because of marshy land, high humidity and waterlogging. In contrast, the Bundelkhand plateau region of south-western Uttar Pradesh is affected by drought, drinking-water scarcity, food insecurity and heatwave risks. The rapidly industrialised region of western Uttar Pradesh faces air pollution and lifestyle-related non-communicable diseases (NCDs).
- 92. Explanation:** The Government of India launched the 'National Sickle Cell Anaemia Elimination Mission' to eliminate a genetic blood disorder that is highly prevalent among several tribal populations. Its principal objective is to eliminate sickle cell disease as a public health problem by the year 2047. Under the mission, approximately 7 crore individuals aged 0 to 40 years in tribal and high-risk areas were to be screened during the initial phase, a target that had been achieved by July 2026. Therefore, both statements are correct.
- 93. Explanation:** The spread of every infectious disease involves a biological chain known as the 'chain of infection'. It includes six principal links: 1. pathogen (bacterium/virus), 2. reservoir (where the pathogen lives), 3. portal of exit (the route through which it leaves the body), 4. mode of transmission (air, water, contact or vector), 5. portal of entry (the route through which it enters the host's body), and 6. susceptible host (a person with weak immunity). A hospital's financial budget is part of the management of basic health services, but it is not a component of the biological/epidemiological chain of infection.
- 94. Explanation:** The Central Water Commission has established an extensive nationwide network to provide advance warnings regarding river water levels and potential flood hazards. According to the updated data as of 4 December 2025, a total of 350 Flood Forecasting Stations are operational in India. Of these, Uttar Pradesh has the highest number, with 44 stations. Owing to the extensive network of major rivers such as the Ganga, Ghaghara, Rapti and Gandak in Uttar Pradesh, and the flood-prone nature of the Purvanchal and Terai regions, this early-warning system plays an extremely important role in disaster management.

- 95. Explanation:** BRCA-1 and BRCA-2 are tumour suppressor genes found in the human body. The proteins produced by these genes help repair damaged DNA. When harmful mutations occur in these genes, uncontrolled cell division begins. Such mutations increase the risk of hereditary breast cancer and ovarian cancer several-fold, particularly in women. In contrast, cholera, typhoid, malaria and ringworm are infectious diseases that are not associated with genetic BRCA mutations.
- 96. Explanation:** India's Universal Immunisation Programme (UIP) is one of the largest public health programmes in the world. Its primary objective is to protect newborns, children and pregnant women from vaccine-preventable diseases such as tuberculosis, diphtheria, whooping cough, tetanus, polio, measles, rubella, hepatitis B, rotavirus and Japanese encephalitis. This programme is a highly effective preventive health strategy for reducing the Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR).
- 97. Explanation:** To make the treatment of drug-resistant tuberculosis (Drug-Resistant TB) more accessible and effective, the BPaL-M regimen has been adopted by WHO and the National TB Elimination Programme. BPaL-M stands for Bedaquiline, Pretomanid, Linezolid and Moxifloxacin, which together constitute the drug combination. Compared with older, complex treatment regimens, this treatment regimen is considered much shorter (only 6 months), safer and highly effective. It is proving to be life-saving for patients suffering from multidrug-resistant TB (MDR-TB).
- 98. Explanation:** Primary Health Care (PHC) is the first line of the public health system. If services such as immunisation, health education, regular screening for diabetes, blood-pressure checks, timely treatment of common illnesses and maternal care are delivered effectively at the primary level itself, diseases can be controlled at an early stage. This prevents diseases from becoming severe, thereby reducing patient crowding due to common illnesses and the unnecessary burden on medical colleges and super-speciality (tertiary) hospitals. Therefore, both the Assertion and the Reason are true, and the Reason correctly explains the Assertion.
- 99. Explanation:** Marfan syndrome is an autosomal dominant genetic disorder that affects the connective tissues of the body. It is caused by a mutation in the FBN1 gene, which encodes the fibrillin-1 protein. Its main clinical features include an abnormally tall stature, excessively long and slender fingers (Arachnodactyly), protrusion or depression of the breastbone, displacement of the lens of the eye (Ectopia lentis), and dilation or dissection of the main artery of the heart (Aorta). It is not a water-borne or airborne infectious disease.
- 100. Explanation:** So far, three National Health Policies have been implemented in India:
First National Health Policy (1983): Based on the Alma-Ata Declaration, it set the goal of 'Health for All by 2000' and emphasised the primary health network.
Second National Health Policy (2002): It aimed at decentralisation, increasing public health expenditure and eliminating communicable diseases.
Third National Health Policy (2017): Its objectives include Universal Health Coverage (UHC), a digital health information system, prevention of non-communicable diseases and spending 2.5% of GDP on health.
- 101. Explanation:** Occupational health risks are directly associated with a person's workplace environment. Mine workers are at risk of silicosis due to dust particles, farmers face the risk of illnesses due to pesticides and exposure to sunlight, and industrial workers face risks from chemicals and accidents. Rickshaw drivers are affected by physical labour, excessive heat, air pollution, dust and joint injuries, not by genetic mutations in mitochondrial DNA, which arise from gene mutations at the time of conception. Therefore, option (c) is incorrectly matched.
- 102. Explanation:** MELAS (Mitochondrial Encephalomyopathy, Lactic Acidosis, and Stroke-like episodes) is a rare genetic disorder caused by mutations (pathogenic changes) in mitochondrial DNA (mtDNA). Since sperm do not contribute their mitochondria during fertilisation, mitochondrial diseases are transmitted to offspring only through the mother (Maternal Inheritance). This disorder severely affects organs with high energy requirements, such as the brain and muscles, causing seizures, stroke-like symptoms and muscular weakness. It is not an infectious disease.
- 103. Explanation:** In food security, 'access' means that individuals have adequate economic and physical means to obtain nutritious food. Schemes such as the Targeted Public Distribution System (TPDS), the National Food Security Act (NFSA), and 'One Nation One Ration Card' (ONORC) ensure the physical availability of foodgrains at subsidised rates or free of cost to poor, migrant and disadvantaged groups. The mere availability of food in the market or its advertisement is not sufficient if the food is not within the purchasing power or reach of poor families.
- 104. Explanation:** The modern concept of health does not regard it merely as the absence of disease, but views it as a continuum (Health-Illness Continuum). It is a relative and dynamic state that changes over time and with circumstances along a continuum from optimal health to ill health and death. Therefore, Assertion (A) is true. An individual's daily lifestyle, nutrition, workplace stress, family environment and surrounding environment continuously influence their level of health. Therefore, Reason (R) is also true and provides the correct and logical explanation of Assertion (A).

- 105. Explanation:** In public health, 'health inequality' refers to measurable differences in health indicators among different groups. These may also include differences involving biological or age-related factors; however, all such differences should not automatically be considered unavoidable. In contrast, 'health inequity' refers to health differences that are avoidable and unjust and arise from socio-structural barriers such as poverty, caste, race, gender, regional deprivation, institutional discrimination and unequal availability of health resources. Thus, inequity is associated with social justice and fairness. Therefore, option (b) is the correct answer.
- 106. Explanation:** In medical sociology and medical anthropology, health-seeking behaviour is an analytical concept that examines which treatment source people first choose when they fall ill and how they subsequently switch to, revisit or sequentially use other treatment sources. Some people may begin with home-based or traditional treatment, while others may directly seek formal health care; the treatment pathway varies according to the disease and the social context. This behaviour is influenced by an individual's cultural beliefs, folk explanations of illness, cost of treatment and proximity of services; the nature and severity of the illness, availability of services, reputation of the provider, previous experience and social circumstances are also important. Therefore, option (a) is the correct answer.
- 107. Explanation:** The Human Development Index, introduced in the first Human Development Report of 1990, is a composite measure of average achievement in three major dimensions of human development:
- 1. Health dimension** – whose indicator is 'life expectancy at birth' (Pair 1 is correct);
 - 2. Education dimension** – whose two indicators are the mean years of schooling of adults aged 25 years or above and the expected years of schooling of children of school-entry age (Pair 2 is correct); and
 - 3. Standard of living** – which is measured by Gross National Income per capita at purchasing power parity (Pair 3 is correct).
- Therefore, all three pairs are correctly matched.
- 108. Explanation:** The National Health Mission of the Government of India is a comprehensive health mission with two main sub-missions: (1) the National Rural Health Mission (NRHM), which was launched on 12 April 2005; and (2) the National Urban Health Mission (NUHM), which was approved by the Union Cabinet on 1 May 2013 as a sub-mission of the NHM. Through the NRHM, this mission strengthens accessible, affordable and quality health services for the rural population, particularly vulnerable groups, and through the NUHM, for the urban poor, slum dwellers and other disadvantaged groups; the NUHM places special emphasis on primary health care. Therefore, option (a) is true.
- 109. Explanation:** Observer bias arises when a researcher or investigator already knows the disease status or study group to which a participant belongs. Owing to this prior knowledge, the investigator may unconsciously alter the observation of the person, the manner of asking questions, or the process of measurement or recording the results, thereby influencing the findings. To reduce its risk, 'blinding' of the outcome assessor, standardised protocols, clearly defined criteria and observer training are adopted in research. Therefore, option (b) is true.
- 110. Explanation:** Proactive Corporate Social Responsibility (Proactive CSR) is not limited merely to minimum or formal legal compliance. It means that an institution or corporation anticipates social needs and, going beyond the applicable statutory obligations, takes concrete steps for social welfare, environmental protection and the upliftment of disadvantaged communities and communities facing discrimination—such as organising free health camps in rural areas and slums, conducting educational programmes and providing clean drinking water. Therefore, option (b) is the correct answer.
- 111. Explanation:** The hard nail plate is an accumulation of dead cells composed of a hard protein called keratin. Living cells located in the nail matrix divide and become keratinised to form a new nail plate. Keeping the nails short and clean is an important part of personal hygiene because more dirt and microorganisms may accumulate beneath long nails, increasing the risk of certain infections through hand-to-mouth contact or food contamination. Therefore, option (a) is correct.
- 112. Explanation:** The 'Duncan Socio-economic Index' (SEI), developed by Otis Dudley Duncan, is a major index used in sociology to assign scores to the socioeconomic status of occupations; for an individual, it is applied on the basis of their occupation. This index statistically relates the social prestige of different occupations (Occupational Prestige) to the educational attainment of the people employed in those occupations and the income level associated with the occupation, thereby providing a composite occupational socioeconomic status score. Therefore, option (a) provides the correct representation.
- 113. Explanation:** The family is the primary unit of society and the first centre of health socialisation. A child's early habits—such as food choices, personal hygiene, handwashing, and when and where to seek treatment during illness—are initially and predominantly influenced by the family environment; other agencies of socialisation also exert influence later.

The family plays an important role in providing emotional support during illness, ensuring that medicines are taken and making decisions related to nutrition. An aware and supportive family constitutes an important social basis for an individual's better health.

- 114. Explanation:** The English word 'Health' originated from the Anglo-Saxon word 'Hael' or 'Hale', meaning "to be safe, healthy, sound and free from infirmity". Since ancient times, this concept was not limited merely to the absence of disease; rather, it was regarded as a symbol of the integrity, soundness and wholeness of the body, mind and spirit. This etymology provides the historical foundation of the holistic and multidimensional nature of health.
- 115. Explanation:** According to the National Family Health Survey-5 (2019–21) data, the prevalence of anaemia among young children aged 6 to 59 months in India increased from 58.6% in NFHS-4 (2015–16) to 67.1%. This represents an alarming increase of 8.5 percentage points. This high prevalence is a serious public health concern. Anaemia is a multifactorial condition. Its causes may include deficiencies of iron and other micronutrients, infections, worm infestation and certain inherited blood disorders. The prevalence data of the NFHS do not themselves establish any single cause.
- 116. Explanation:** Accessibility indicates how easily and quickly an attitude or thought comes to mind from memory. An attitude that becomes immediately and automatically activated in a person's mind directly guides the person's immediate behaviour without any prolonged deliberation. Therefore, Assertion (A) is true. The fundamental reason is that readily accessible memories become immediately available as mental resources in the decision-making process. Therefore, Reason (R) is also true and provides the correct and logical explanation of Assertion (A).

117. Explanation: According to Festinger, when there is a contradiction between an individual's thoughts and actual behaviour, cognitive dissonance (tension) arises. To remove this tension, the individual either changes their behaviour, changes their thoughts, or adds consonant cognitions that justify their behaviour; therefore, Statements 1 and 2 are true. However, adding further dissonant cognitions and thereby increasing one's mental discomfort cannot be a strategy for reducing dissonance; therefore, Statement 3 is false.

118. Explanation: The Community Health Officer mainly leads the primary healthcare team at the Ayushman Arogya Mandir at the Sub-Health Centre level. Their main role is to prevent communicable and non-communicable diseases at the primary level, supervise immunisation and nutrition campaigns, provide first aid, and refer patients to a higher-level health facility when they show danger signs. They also play an important role in sanitation, drinking water and biomedical waste management. Therefore, option (b) is correct.

119. Explanation: Feedback is the final and most important stage of the communication cycle. It completes two-way communication. Through feedback, the sender assesses whether the receiver has understood the message in the same sense in which the sender intended it. If there is any confusion or ambiguity in the message, it is corrected immediately on the basis of feedback. Without it, communication is considered incomplete and one-way.

120. Explanation: These three means of social control operate through different mechanisms: religion disciplines an individual's conduct through beliefs and fears concerning supernatural power and the concepts of sin and merit; morality is based on the individual's inner consciousness and the voice

of conscience, which distinguishes between right and wrong; whereas law is a formal, written means supported by the sovereign power of the State, and its violation results in legal punishment. Therefore, option (c) is correct.

121. Explanation: According to Gordon Allport, attitude is an internal mental and neural state of an individual. It is not a directly observable phenomenon; therefore, direct observation of it is not possible. Psychologists infer an individual's attitude on the basis of their statements, choices, responses and overt behaviour. It is formed through experience, but owing to situational pressures, it does not predict behaviour with 100 per cent accuracy. Therefore, option (a) is correct.

122. Explanation: According to social psychology, a positive mood, geographical proximity and repeated exposure to a person or object—the mere-exposure effect—reduce uncertainty and generate liking. Society tends to regard physically attractive people as superior in other qualities as well, such as intelligence or honesty; this is called the halo effect. Byrne and Newcomb emphasised the similarity–attraction relationship, whereas Rosenbaum demonstrated that dissimilarity leads to repulsion. Therefore, option (b) is true.

123. Explanation: The Male Health Worker is responsible for implementing national communicable disease control programmes at the Sub-Centre level. His main functions include collecting blood samples, preparing blood smears and carrying out insecticide spraying for the control of malaria and dengue; identifying and referring suspected cases of tuberculosis (TB) and leprosy; and ensuring the regular intake of medicines under DOTS. He also contributes to maintaining drainage and environmental sanitation in the village. Therefore, option (c) is correct.

- 124. Explanation:** In informal social control, 'leadership' determines direction; a competent leader becomes a role model for people through their conduct, knowledge and personality and helps keep society within accepted norms. 'Humour and ridicule', on the other hand, exert subtle social pressure. When an individual violates society's established code of conduct or folkways, the psychological fear that 'people will laugh at them' or 'they will be ridiculed' prevents them from engaging in deviant behaviour. Such pressure controls behaviour without the involvement of the police or courts.
- 125. Explanation:** For social interaction, the mere presence of two persons at the same place or merely viewing someone as an inanimate object is not sufficient. A 'meaningful reciprocal response' and communication between both parties are essential. Such communication may be verbal, through language, or non-verbal, through gestures, facial expressions and body language. In this process, both parties are influenced by each other's behaviour and construct meaning. Therefore, option (c) is false/incongruous.
- 126. Explanation:** Attitude provides mental ease to an individual, enabling them to quickly like or dislike things in the environment. It helps in predicting the 'direction' of possible behaviour and forms the basis of persuasion. However, it cannot predict behaviour with '100 per cent certainty' because actual behaviour may also be strongly influenced by other factors, such as the immediate situation, social pressure, self-awareness and the intensity of the attitude. This was demonstrated by LaPiere's experiment. Therefore, option (d) is false.
- 127. Explanation:** Human health is jointly influenced by age, biological sex, genetic predisposition, education, lifestyle, environment and healthcare services. Disease patterns change with age. In particular, the burden of certain communicable diseases may be higher among infants and young children, whereas the prevalence of chronic non-communicable conditions, such as hypertension, diabetes, heart disease and arthritis, generally increases in old age. Biological sex influences disease risk associated with anatomy, chromosomes and hormones, whereas gender may affect social roles and access to healthcare services. Genetics influences susceptibility to disease, but does not by itself determine whether disease will occur. Therefore, option (a) is correct.
- 128. Explanation:** According to Article 198, a Money Bill cannot be introduced in the Legislative Council of a State. It is introduced in the Legislative Assembly on the recommendation of the Governor. In a State having a Legislative Council, the Bill is sent to the Council after being passed by the Legislative Assembly. The Council may make its recommendations within 14 days, but the Legislative Assembly is not bound to accept them. If the Council does not return the Bill within 14 days, it is deemed to have been passed by both Houses in the form in which it was passed by the Legislative Assembly. According to Article 199(3), the Speaker of the Legislative Assembly decides whether a Bill is a Money Bill. Therefore, option (c) is correct.
- 129. Explanation:** According to Article 129, the Supreme Court is a Court of Record, and according to Article 215, every High Court is a Court of Record. The records of their judicial acts and proceedings possess evidentiary value, and when produced, their authenticity is generally not questioned. The Supreme Court and every High Court also have the power to punish for contempt of the court concerned. The Constitution does not declare District Courts to be Courts of Record.
- 130. Explanation:** According to Article 320, the Union Public Service Commission conducts examinations for appointments to the services of the Union. The Commission is consulted on methods of recruitment, appointments, promotions, transfers from one service to another and disciplinary matters. It is also the Commission's duty to advise on other matters referred to it by the President. At the request of two or more States, the Commission assists in joint recruitment schemes for services requiring special qualifications. Extending the term of the Lok Sabha is not a function of the Commission. Under Article 83(2), during an Emergency, Parliament may extend the term of the Lok Sabha by law for a limited period.
- 131. Explanation:** The Twelfth Schedule specifies 18 functions of municipalities. These include urban planning, regulation of land use, planning for economic and social development, roads and bridges, water supply, public health, sanitation, conservancy, solid waste management, fire services, urban forestry, slum improvement, urban poverty alleviation, parks and playgrounds, registration of births and deaths, public amenities and regulation of slaughterhouses. International treaties, defence and currency are Union subjects.
- 132. Explanation:** According to Article 324(5) of the Constitution, the Chief Election Commissioner can be removed only in the same manner and on the same grounds as a Judge of the Supreme Court. This process is completed on the grounds of proved misbehaviour or incapacity by a special majority in each House of Parliament, followed by an order of the President. The Chief Election Commissioner and other Election Commissioners hold office for six years from the date on which they assume office or until they attain the

age of 65 years, whichever is earlier, and are not eligible for reappointment. When an Election Commissioner is appointed as the Chief Election Commissioner, the combined tenure in both offices cannot exceed six years. Other Election Commissioners cannot be removed except on the recommendation of the Chief Election Commissioner. They are appointed by the President on the recommendation of a Selection Committee.

133. Explanation: Article 243K entrusts the State Election Commission with the responsibility for preparing electoral rolls and for the superintendence, direction and control of Panchayat elections. Article 243O bars challenges in courts to laws relating to the delimitation of constituencies and the allotment of seats, and provides that an election dispute may be raised through an election petition. Article 243G relates to the powers and functions of Panchayats. The Gram Sabha is mentioned in Article 243A.

134. Explanation: According to Article 155, the Governor is appointed by the President. Under Article 156, the Governor holds office during the pleasure of the President. Although the normal term is five years from the date of entering upon office, the Governor continues in office until a successor enters upon office. The Governor is not an elected office-holder. The Governor is the constitutional head of the State and ordinarily acts on the aid and advice of the Council of Ministers headed by the Chief Minister.

135. Explanation: Under Article 368, Parliament may amend the Constitution, including the Preamble. The words 'Socialist', 'Secular' and 'Integrity' were added to the Preamble by the 42nd Constitution Amendment Act, 1976. However, according to the Kesavananda Bharati case, 1973, Parliament's amending power is limited by the basic structure doctrine.

Parliament cannot destroy or damage the basic structure of the Constitution. Therefore, the statement is true, but the reason is false.

136. Explanation: The Speaker of the Lok Sabha conducts the proceedings of the House in an orderly manner and performs the role of an impartial presiding officer in parliamentary procedure. The Speaker's important powers include making the final decision as to whether a Bill is a Money Bill. When a joint sitting of both Houses of Parliament is held, the Speaker of the Lok Sabha presides over it. In addition, the Speaker ensures the maintenance of order in the House and compliance with the rules relating to debates, voting and procedure. The power to promulgate an Ordinance is vested in the President.

137. Explanation: The Preamble recognises justice in its social, economic and political forms. Liberty includes liberty of thought, expression, belief, faith and worship. Equality relates to equality of status and opportunity, whereas fraternity assures the dignity of the individual and the unity and integrity of the nation. Therefore option (a) is correct.

138. Explanation: According to Article 197, the Legislative Council may delay an ordinary Bill for a maximum of three months on the first occasion and, after it has been passed again by the Legislative Assembly, for a maximum of one month on the second occasion. Thereafter, the will of the Legislative Assembly prevails. There is no provision for a joint sitting in a State Legislature similar to that of Parliament. Therefore, the Legislative Assembly ultimately has primacy in matters relating to ordinary Bills. The Legislative Council is a revising and delaying chamber, but it cannot permanently obstruct the legislative will of the Legislative Assembly.

139. Explanation: Under the production method, the value of final goods and services produced in an economy during an accounting year is added. To avoid double counting, the value of intermediate goods is not included separately. Alternatively, only the value added at each stage of production may be added. This method assesses output from the production side. To obtain the national product, net primary income from abroad is included. The income method adds factor incomes, whereas the expenditure method adds final expenditures.

140. Explanation: The Lorenz curve graphically represents the distribution of income or wealth. It shows the relationship between the cumulative percentage of the population and the cumulative percentage of total income received by it. Under perfect equality, the distribution would lie along the line of perfect equality. The farther the actual Lorenz curve bends away from this line, the more unequal the distribution is considered to be. It is a visual or graphical measure of inequality. The Gini coefficient expresses the same inequality numerically, whereas the unemployment rate and population density are different types of indicators.

141. Explanation: Frictional unemployment occurs during the interval in which an individual leaves one job and searches for another. Obtaining information in the labour market, applying for jobs, relocating or finding suitable work takes time; therefore, it is generally short-term. It does not necessarily arise from a widespread economic recession or a skills mismatch. In structural unemployment, there is a mismatch between an individual's skills and the requirements of available jobs, whereas frictional unemployment may be a part of the natural process of job search.

- 142. Explanation:** Production, consumption and investment are regarded as three fundamental activities in every economy. Production creates goods and services. In consumption, households and other units use these goods and services. Investment leads to an increase in machinery, buildings, equipment and other capital assets, thereby increasing future productive capacity. These activities are interrelated. An increase in production raises income, consumption and investment; consumer demand encourages producers to produce more; and investment expands future production.
- 143. Explanation:** The Rangarajan Committee linked the poverty line with broader nutritional and consumption requirements. Along with calories, it took protein and fat into account and also included expenditure on clothing, house rent, transport and education, along with other behaviourally determined non-food expenditure. This makes it clear that poverty was not viewed merely in terms of satisfying hunger or meeting energy requirements. The Committee's approach encompasses both nutritional adequacy and the essential non-food requirements of life, thereby enabling a more comprehensive assessment of a minimum dignified standard of living.
- 144. Explanation:** Both extreme values of the Gini coefficient have been correctly stated. Zero represents perfect equality and one represents perfect inequality. Therefore, both the Assertion and the Reason are true. However, the Reason does not explain why the value zero represents perfect equality; it only states the meaning of the other extreme, namely one. In an Assertion–Reason question, the logical relationship between the two statements must also be examined along with their truth. Here, both are independently correct, but the Reason does not directly explain the Assertion.
- 145. Explanation:** NITI Aayog is the nodal agency for the National Multidimensional Poverty Index in India. The ten indicators of the Global Multidimensional Poverty Index were taken as the basis for the national index, but maternal health and bank account were also added to reflect Indian conditions more appropriately. Thus, in the national index, poverty is viewed more comprehensively in terms of deprivations associated with three dimensions—health, education and standard of living. Instead of replacing income-based poverty measurement, it presents a complementary and detailed picture of deprivation.
- 146. Explanation:** The difference between market price and factor cost is net indirect taxes. Therefore, to obtain Gross Domestic Product at factor cost, net indirect taxes are deducted from Gross Domestic Product at market prices. Net indirect taxes are obtained by deducting subsidies from indirect taxes. Deducting depreciation converts a gross concept into a net concept, whereas adding net factor income from abroad converts a domestic concept into a national concept. In the current national accounting system, Gross Value Added at basic prices and Gross Domestic Product at market prices are used in place of Gross Domestic Product at factor cost. The base year of the new national series released in February 2026 is 2022-23.
- 147. Explanation:** In the Human Development Index, the health dimension is measured by life expectancy at birth. It indicates the average number of years a newborn is expected to live on the basis of prevailing mortality conditions. Life expectancy reflects the combined outcome of nutrition, health services, sanitation, disease control and the overall standard of living. The number of hospitals or expenditure on medicines may be inputs into the healthcare system, but they are not the direct health indicators used in the Human Development Index. Therefore, life expectancy at birth is the correct answer.
- 148. Explanation:** The Inequality-adjusted Human Development Index was published for the first time in the Human Development Report, 2010. It takes into account inequality in the distribution of achievements in the health, education and income dimensions of the Human Development Index. The Human Development Index indicates average achievement, whereas the inequality-adjusted index shows how much actual achievement is reduced due to unequal distribution. The year 1997 is associated with the introduction of the Human Poverty Index, and the year 1990 is associated with the first Human Development Report. Therefore, the correct year is 2010.
- 149. Explanation:** The workforce is the employed component of the labour force, that is, those persons who are actually engaged in an economic activity. The labour force includes unemployed persons along with the workforce because they are seeking work or are available for work. The entire working-age population cannot be called the workforce because it may also include students, persons engaged only in domestic duties, elderly persons or others who are not seeking work. Therefore, the workforce indicates the actual employment situation, whereas the labour force includes employed persons as well as unemployed persons who are seeking work or are available for work.
- 150. Explanation:** The Tendulkar Committee did not restrict poverty measurement solely to a calorie-based norm. It recognised that households also have to incur essential expenditure on education and health and that ignoring such expenditure may lead to an underestimation of the actual standard of living. Therefore, the Committee gave importance to expenditure on education and health, in addition to food, in the assessment of the poverty line. This approach links poverty with broader consumption requirements. The Rangarajan Committee subsequently included protein and fat along with calories, as well as various basic non-food items, more explicitly.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-6

Answer key

1. (b)	2. (c)	3. (b)	4. (b)	5. (b)	6. (c)	7. (b)	8. (d)	9. (d)	10. (d)
11. (d)	12. (a)	13. (a)	14. (d)	15. (a)	16. (a)	17. (a)	18. (a)	19. (a)	20. (b)
21. (c)	22. (d)	23. (b)	24. (b)	25. (d)	26. (b)	27. (a)	28. (c)	29. (c)	30. (a)
31. (b)	32. (a)	33. (d)	34. (a)	35. (c)	36. (b)	37. (c)	38. (a)	39. (c)	40. (c)
41. (d)	42. (d)	43. (b)	44. (b)	45. (c)	46. (a)	47. (a)	48. (d)	49. (a)	50. (d)
51. (a)	52. (a)	53. (d)	54. (b)	55. (b)	56. (a)	57. (a)	58. (b)	59. (a)	60. (c)
61. (d)	62. (a)	63. (a)	64. (a)	65. (b)	66. (d)	67. (b)	68. (b)	69. (b)	70. (d)
71. (b)	72. (b)	73. (b)	74. (a)	75. (a)	76. (a)	77. (c)	78. (c)	79. (b)	80. (a)
81. (c)	82. (a)	83. (b)	84. (b)	85. (c)	86. (a)	87. (d)	88. (a)	89. (a)	90. (a)
91. (d)	92. (b)	93. (d)	94. (b)	95. (a)	96. (b)	97. (b)	98. (b)	99. (d)	100. (b)
101. (b)	102. (b)	103. (b)	104. (b)	105. (b)	106. (a)	107. (a)	108. (a)	109. (a)	110. (a)
111. (d)	112. (d)	113. (a)	114. (a)	115. (a)	116. (d)	117. (b)	118. (b)	119. (d)	120. (b)
121. (a)	122. (b)	123. (a)	124. (b)	125. (a)	126. (a)	127. (a)	128. (b)	129. (c)	130. (b)
131. (a)	132. (d)	133. (a)	134. (b)	135. (c)	136. (d)	137. (b)	138. (a)	139. (d)	140. (a)
141. (b)	142. (b)	143. (c)	144. (d)	145. (a)	146. (c)	147. (b)	148. (d)	149. (b)	150. (a)

Explanation

1. **Explanation:** Mangrove vegetation is an important component of coastal and swamp forests. According to the material, mangroves are salt-tolerant vegetation that thrives in saline marshes, tidal inlets, mudflats and estuaries. Their roots do not always remain submerged in water; rather, they are periodically inundated during high tides. The Ganga–Brahmaputra Delta, the Andaman and Nicobar Islands, and the deltas of the Mahanadi, Godavari, Krishna and Kaveri are their major regions. Hence, option (b) is correct.
2. **Explanation:** The Andaman and Nicobar Islands are located in the Bay of Bengal and comprise a total of 836 islands/islets/rocks. Saddle Peak is their highest peak, with a stated elevation of 732 metres. The principal navigational activities of the Andaman and Nicobar Islands are conducted at Sri Vijaya Puram (formerly Port Blair). Lakshadweep is located in the Arabian Sea and is a group of 36 islands, while Andrott is the largest island of Lakshadweep. Hence, option (c) is correct.
3. **Explanation:** The coastal regions of the Pacific Ocean have the largest number of active volcanoes. For this reason, this region is called the ‘Ring of Fire’. A large number of active volcanoes are also situated along the coasts of the American and Asian continents. This region is associated with plate tectonics and convergent plate boundaries. Antarctica is called the White Continent, the Pamir or the Tibetan Plateau is called the Roof of the World, and the Gulf Stream Current is called the Warm Blanket. Hence, option (b) is correct.
4. **Explanation:** In 2006, the International Astronomical Union provided a new definition of a planet, according to which it must have become the gravitationally dominant body in the region around its orbit and cleared other smaller bodies from that region. Owing to this criterion, Pluto was removed from the category of planets and classified as a dwarf planet. The recognised dwarf planets include Pluto, Ceres, Eris, Haumea and Makemake. Hence, option (b) is correct.
5. **Explanation:** The highest peak of the Aravalli Range is Guru Shikhar, with an elevation of 1722 metres. Guru Shikhar is situated at Mount Abu. The Aravalli Range was formed during the Precambrian period and is among the oldest mountain ranges in India as well as in the world. Dhoopgarh is the highest peak of the Satpura Range, Anamudi is the highest peak of South India, and Doddabetta is the highest peak of the Nilgiri Hills. Hence, option (b) is correct.
6. **Explanation:** According to the 2011 Census, the Gond are stated to be the largest tribal group in Uttar Pradesh in terms of population. The Tharu are a major tribe inhabiting the Terai regions and are stated to be the largest tribe of Uttarakhand. The Buksa are found in Dehradun, Nainital and some parts of Uttar Pradesh. The Raji or Banraut are found in Uttar Pradesh and Uttarakhand. Hence, option (c) is correct.
7. **Explanation:** The longitudinal topographical arrangement of the Himalayas consists of three principal parallel ranges—the Greater Himalayas, the Lesser Himalayas or Himachal, and the Outer or Sub-Himalayas, also known as the Shiwalik Himalayas. The Greater Himalayas form the northernmost and highest range. The Lesser Himalayas lie to their south, while the Shiwaliks form the outermost/southernmost part. Therefore, from north to south, the correct sequence is given in option (b).
8. **Explanation:** Clive is associated with the Treaty of Allahabad of 1765, the Dual Government in Bengal and the White Mutiny. Warren Hastings abolished the Dual Government in Bengal in 1772. Cornwallis introduced the Permanent Settlement system in Bengal in 1793 and is called the Father of the Indian Civil Service. Wellesley is associated with the Subsidiary Alliance system and the establishment of Fort William College. The Vernacular Press Act was enacted in 1878 during the tenure of Lord Lytton.
9. **Explanation:** Kesari and The Mahratta are associated with Bal Gangadhar Tilak. Young India, Harijan, Navajivan, Hind Swaraj and The Story of My Experiments with Truth are journals and works associated with Mahatma Gandhi. Nil Darpan was written by Dinabandhu Mitra. India Divided was written by Dr Rajendra Prasad. The Indian Struggle is associated with Subhas Chandra Bose.
10. **Explanation:** The Gupta period is considered extremely important from the perspective of art, literature and science. The Dashavatara Temple at Deogarh belongs to the Gupta period. Ajanta Caves Nos. 16, 17 and 19 also belong to the Gupta period and contain depictions of scenes associated with the Buddha. Aryabhata wrote the treatise Aryabhatiya. Owing to its cultural and intellectual achievements, the Gupta period is called the Golden Age of Indian history. Hence, all the statements are correct.
11. **Explanation:** Among the Harappan cities, Harappa is associated with the Ravi River, Mohenjo-daro with the Indus River, Kalibangan with the Ghaggar River and Lothal with the Bhogava River. All these pairs are correct.
12. **Explanation:** The list of coins is given in sequence as follows—Sher Shah introduced the silver rupiya and the copper coin known as the dam. Iltutmish introduced the silver tanka and the copper jital. Gold coins such as the mohur, shansab and ilahi are associated with Akbar. The silver coin known as nisar is associated with Jahangir. Hence, among the given options, only rupiya–Sher Shah–silver coin is correctly matched.
13. **Explanation:** Charles Metcalfe is called the Liberator of the Press because, through the Press Act of 1835, he freed the press from previous restrictions. The Vernacular Press Act was enacted in 1878 during the tenure of Lord Lytton and was called the Gagging Act. Ripon repealed it in 1882. Lord Wellesley was associated

with press control and was not a supporter of press freedom. Therefore, option (a) is correct.

14. **Explanation:** An all-India Congress meeting was held at Gowalia Tank Maidan in Bombay on 7–8 August 1942, and the Quit India Resolution was passed on 8 August. The Quit India Movement began on 9 August 1942. Gandhiji gave the slogan ‘Do or Die’. Under Operation Zero Hour, the British Government arrested Gandhiji and other prominent leaders. During the movement, parallel governments were established at places such as Ballia, Tamluk and Satara. Hence, all the statements are correct.

15. **Explanation:** The toxicity of pesticides is indicated through coloured labels based on their LD-50 values. The red label is used for extremely toxic pesticides having an LD-50 value of 1–50 milligrams per kilogram, and its symbol is a skeleton. The yellow label is used for highly toxic pesticides, the blue label for moderately toxic pesticides and the green label for less toxic pesticides. This labelling indicates to the user the level of hazard posed by the pesticide and the degree of precaution required.

16. **Explanation:** Striga, also known as witchweed, is an extremely harmful obligate root-hemiparasitic weed of sorghum. It attaches itself to the roots of sorghum through a haustorium and obtains water, mineral nutrients and some photosynthates. It can restrict plant growth and cause a severe reduction in yield. Its management involves the integrated use of resistant varieties, trap crops in crop rotation, improvement of soil fertility, uprooting Striga before seed formation and herbicides such as 2,4-D according to crop-specific recommendations. Hence, option (a) is correct.

17. **Explanation:** A distress sale is a situation particularly associated with the cash requirements of small and marginal farmers. When a farmer sells more of the crop than is needed for their own requirements because of debt, household expenditure or other urgent needs, the quantity actually sold becomes greater than the marketable surplus. This is called a distress or

forced sale. This situation reflects the weak bargaining power and financial insecurity of farmers. Hence, option (a) is correct.

18. **Explanation:** Pralinage is a pesticide-application method associated with banana plants. In this method, before banana plants are planted, their roots are treated with mud and carbofuran 3% CG to control nematodes. Placing coconut roots in a polythene bag containing pesticide is called root feeding. Injecting pesticide into trees is called trunk or stem injection, while the treatment of sugarcane setts is called seed or sett treatment.

19. **Explanation:** The e-Shram portal is a national database of unorganised workers and helps connect them with social security, employment and skill services. The Pradhan Mantri MUDRA Yojana primarily provides institutional and collateral-free loans to micro-enterprises, while Startup India promotes eligible start-ups and the entrepreneurship ecosystem. The Pradhan Mantri Gram Sadak Yojana is concerned with providing road connectivity to rural habitations, while the Jal Jeevan Mission is concerned with providing drinking water through tap connections to rural households. Ration portability enables eligible beneficiaries under the NFSA, particularly migrant workers and eligible urban poor, to receive ration even after changing their place of residence. Hence, the correct code is (a).

20. **Explanation:** During the 1980s, India adopted certain limited liberalisation measures before introducing comprehensive economic reforms. Industrial licensing was relaxed, and measures associated with technological upgradation, broad-banding and increasing production capacity were introduced. During this decade, the average annual growth rate of real gross domestic product was approximately 5.8 per cent, which was higher than the earlier average growth rate of approximately 3.5 per cent. However, along with this accelerated growth, the government deficit and domestic and external borrowing also increased. In the latter half of the decade, imports increased more rapidly than exports,

pressure on foreign-exchange reserves intensified and the balance of payments position continued to weaken. Hence, option (b) is correct.

21. **Explanation:** At the time of Independence, the Indian economy was struggling with colonial exploitation, widespread poverty, low agricultural productivity, severe food shortages, unemployment and regional disparities. The development of modern industries was slow and limited. The capital-goods industry was also extremely weak. Therefore, the statement that India possessed an extremely strong and extensive industrial base is not correct. Hence, option (c) is the correct answer.

22. **Explanation:** To understand India's economic reforms, competitive-examination literature generally classifies them into four generations. The first-generation reforms began after the economic crisis of 1991. Their main objective was to reduce government control over the economy and increase the role of the market. Relaxation of industrial licensing, import-export liberalisation, financial-sector reforms and disinvestment in public-sector enterprises were their major components. The second-generation reforms emphasised improving the efficiency of institutions and administration rather than merely opening up the market. These include reforms related to labour, land, law, regulation, infrastructure, education, health and public-service delivery.

The objective of the third-generation reforms was to extend the benefits of economic reforms to the state, district, Panchayat and local-community levels. Therefore, they are associated with decentralisation and the empowerment of Panchayati Raj Institutions.

The fourth-generation reforms are based on the extensive use of information technology. Digital governance, online public services, digital payments, technological innovation and a data-based economy are their major examples. Therefore, “Fourth generation—information technology-based economy and digital payments” is correctly matched.

- 23. Explanation:** There is a clear difference between deoxyribonucleic acid and ribonucleic acid on the basis of their sugars and nitrogenous bases. Deoxyribonucleic acid contains deoxyribose sugar and the base thymine. Ribonucleic acid contains ribose sugar, and the nitrogenous base uracil is found in place of thymine. More precisely, in eukaryotic cells, most DNA is located in the nucleus; some DNA is also found in the mitochondria. Different types of RNA are found in both the nucleus and the cytoplasm. This locational fact is not necessary for the principal chemical distinction asked in the question. Hence, option (b) is correct.
- 24. Explanation:** A molecule is an electrically neutral unit composed of two or more chemically bonded atoms that can exist independently. Water is a compound, and its molecule is H_2O , consisting of two hydrogen atoms and one oxygen atom. Molecules of elements are composed of atoms of the same type and are called homonuclear molecules. Molecules of molecular compounds are composed of more than one type of atom and are called heteronuclear molecules. Hence, option (b) is correct.
- 25. Explanation:** A chloroplast is a photosynthetic organelle found in the photosynthetic cells of plants and in photosynthetic algae. In photosynthetic plant cells, photosynthesis occurs in the chloroplast. Light reactions occur mainly in the thylakoid membranes, while carbon reactions occur in the stroma. Chloroplasts possess their own deoxyribonucleic acid, ribonucleic acid, 70S ribosomes and limited gene-expression and protein-synthesis machinery. They possess their own limited genome and protein-synthesis system and can divide; however, they depend on nuclear genes for most essential proteins. Therefore, they are called semi-autonomous organelles. Hence, all three statements are correct.
- 26. Explanation:** According to Blackman's Law of Limiting Factors, if a chemical or biochemical process is influenced by more than one factor, its rate is determined by the factor whose availability is nearest to its minimum value. When the availability of the limiting factor is increased in a favourable direction, the rate of the process increases until another factor becomes limiting. Factors such as light, carbon dioxide, water and temperature influence photosynthesis. Therefore, option (b) is correct.
- 27. Explanation:** Acids are generally described as having a sour taste, but unknown substances or chemicals should not be tasted or touched. Acids turn blue litmus red, and H_2 does not remain free in water; in an aqueous solution, acids provide $H_2(aq)$, that is, H_2O_2 . Bases turn red litmus blue and produce hydroxide ions in water. A base that is soluble in water is called an alkali. At approximately $25^\circ C$, a pH below 7 is acidic, 7 is neutral and above 7 is alkaline; the neutral pH may change with temperature. Therefore, option (a) is correct.
- 28. Explanation:** Electric charge is a scalar quantity, and its SI unit is the coulomb. Charges of the same sign repel each other, whereas charges of opposite signs attract each other. The total charge of an isolated system remains conserved; charge may be transferred or redistributed, but the total charge is neither created nor destroyed. Static electricity generally results from an imbalance of charge caused by the transfer or redistribution of electrons. Therefore, option (c) is correct.
- 29. Explanation:** In autotrophic nutrition, organisms prepare their own food from simple inorganic substances such as water, carbon dioxide and minerals with the help of light energy or, in the case of some autotrophic microorganisms, chemical energy. Green plants convert carbon dioxide and water into carbohydrates in the presence of sunlight and chlorophyll. Nutrition obtained from dead and decaying organic matter is called saprotrophic nutrition, whereas dependence on other organisms is a characteristic of heterotrophic nutrition. Therefore, option (c) is the correct answer.
- 30. Explanation:** The Kayakalp Initiative was launched on 15 May 2015 to promote cleanliness, hygiene and infection control in public health facilities. Its objective is to make health facilities clean, safe and patient-friendly and to incentivise better-performing institutions. Its updated comprehensive framework includes health-facility upkeep, sanitation and hygiene, waste management, infection prevention and control, support services, hygiene promotion, cleanliness outside the boundary wall and eco-friendly arrangements. Therefore, option (a) is correct.
- 31. Explanation:** The National Programme Coordination Committee is chaired by the Mission Director. This committee conducts the programme and financial appraisal of the State Programme Implementation Plan. It includes representatives of the State Government, the technical and programme divisions of the Ministry of Health and Family Welfare and the concerned national technical support agencies. Representatives of other relevant departments and ministries may also participate as required. On the basis of the committee's appraisal, the Union Secretary for Health and Family Welfare, as Chairperson of the Empowered Programme Committee, approves the State's plan. Therefore, option (b) is correct.
- 32. Explanation:** Behaviour Change Communication is considered necessary because laws, schemes and hospital-based services alone are not sufficient for comprehensive and sustainable improvement in health. Health is also influenced by an individual's daily habits, family or social support, community participation, and social and environmental conditions. Certain unsafe behaviours increase the likelihood of the spread of infections, whereas behaviours such as tobacco use, an unhealthy diet and physical inactivity increase the risk of non-communicable diseases. Behaviour Change Communication helps people adopt healthy behaviours by providing them with accurate information, motivation, necessary skills and support. Therefore, option (a) is correct.

- 33. Explanation:** The State Programme Implementation Plan is a consolidated plan comprising the District and City Health Action Plans. It also includes activities to be carried out at the State level. This arrangement strengthens local planning at the district and city levels. It also helps ensure the approval of adequate resources for the action plans of high-priority districts and the timely communication of approvals to the State and the concerned districts. Therefore, all three statements are correct. Hence, option (d) is correct.
- 34. Explanation:** Article 22 provides protection against arrest and detention in certain cases. According to it, an arrested person must be informed, as soon as possible, of the grounds of arrest. The person also has the right to consult and be defended by a legal practitioner of their choice. It is mandatory to produce the arrested person before the nearest magistrate within 24 hours of the arrest, excluding the time necessary for the journey. After this period, the person cannot be detained without the authority of a magistrate. Separate constitutional provisions apply in the case of an enemy alien and a person under preventive detention.
- 35. Explanation:** The prescribed total strength of the Uttar Pradesh Legislative Council is 100. Of these, 38 members are elected by the members of the State Legislative Assembly, 36 are elected from local authorities' constituencies, 8 from graduates' constituencies and 8 from teachers' constituencies. The remaining 10 members are nominated by the Governor. The Legislative Council is a permanent House and is not subject to dissolution. Ordinarily, the term of a member is six years, and as nearly as possible, one-third of the members retire on the expiration of every second year.
- 36. Explanation:** The Constitution of India establishes a system of government with federal features, but several provisions make the Union relatively stronger than the States. According to Article 248, subject to Article 246A, Parliament has exclusive legislative power over matters not enumerated in the State List or the Concurrent List. Entry 97 of the Union List in the Seventh Schedule also places such residuary matters and taxes within Parliament's legislative domain. Therefore, option (b) is correct. Subjects of national importance in the Union List, the extensive powers of Parliament during an Emergency, Parliament's power to alter the areas and boundaries of States, the appointment of Governors by the President and the provision for All India Services also reflect the position of a strong Centre.
- 37. Explanation:** The original Constitution did not contain a separate mention of Fundamental Duties. On the recommendation of the Sardar Swaran Singh Committee, Article 51A was inserted in Part IV-A of the Constitution by the 42nd Constitution Amendment Act, 1976. This provision came into force on 3 January 1977 and initially contained 10 Fundamental Duties. Subsequently, the eleventh Fundamental Duty was added by the 86th Constitution Amendment Act, 2002. This duty came into force on 1 April 2010. According to it, it is the duty of a parent or guardian to provide opportunities for education to their child or ward between the ages of six and fourteen years.
- 38. Explanation:** The Right against Exploitation is provided under Articles 23 and 24 in Part III of the Constitution. Article 23(1) prohibits traffic in human beings, begar and other similar forms of forced labour. Any contravention of this provision is punishable in accordance with law. Bonded labour is a form of forced or partly forced labour. Article 23(2) permits the State to impose compulsory service for public purposes, but no discrimination can be made in such service solely on the grounds of religion, race, caste or class. Article 24 prohibits the employment of a child below fourteen years of age in a factory or mine or in any other hazardous employment.
- 39. Explanation:** Assertion (A) is correct, but Reason (R) is incorrect. Kerala has become the first State in the country to officially declare *Bacillus subtilis* as its State Microbe. The declaration was made at the inauguration of the 'Centre of Excellence in Microbiome'. However, Reason (R) is incorrect because *Bacillus subtilis* is a highly beneficial probiotic bacterium, not a harmful pathogen. It is found in soil, water, plants and fermented foods. It is highly useful for improving human digestive health, strengthening the immune system, enhancing soil fertility and controlling plant diseases.
- 40. Explanation:** Statements 1 and 3 are correct, whereas Statement 2 is incorrect. India ranked 16th among 154 countries in the Responsible Nations Index (RNI) 2026 released by the World Intellectual Foundation. Instead of assessing only economic power, this index is based on three major dimensions—internal responsibility, environmental responsibility and external/global responsibility. Singapore, Switzerland and Denmark occupied the top three positions, respectively, in this index. India's performance reflects its balanced approach towards citizens' welfare, environmental protection, climate initiatives and international cooperation.
- 41. Explanation:** All three statements are correct. Graça Machel, former Education Minister of Mozambique and social activist, was selected for the Indira Gandhi Prize for Peace for the year 2025 for her contribution to education, health, nutrition and child development. Owing to her marriage to Mozambique's first President, Samora Machel, in 1975 and to South African President Nelson Mandela in 1998, she is the only woman in the world to have become the First Lady of two different countries. The selection was made by an international jury chaired by former National Security Adviser Shivshankar Menon. The award carries a cash prize of ₹1 crore.

42. Explanation: Statement (D) is incorrect. Indusfood 2026 was not a state-level organic farming policy, but India's leading global food and beverage sourcing exhibition and Asia's major food and beverage trade fair. Its ninth edition was organised by the Trade Promotion Council of India from 8 to 10 January 2026 at India Expo Centre and Mart, Greater Noida. It was inaugurated by Union Minister for Food Processing Industries Chirag Paswan. The objective of the event was to provide a common platform to Indian food producers, international buyers, policymakers and industry stakeholders to promote global trade cooperation and long-term partnerships. The announcement of the India-UAE Food Corridor Initiative and the related Memorandum of Understanding was among its major attractions.

43. Explanation: Lucknow generates approximately 2,000 metric tonnes of municipal solid waste every day. For its scientific processing, the Lucknow Municipal Corporation and Bhumi Green Energy have established three plants, each with a capacity of 700 metric tonnes per day. Their combined processing capacity is 2,100 metric tonnes per day. The waste comprises approximately 55% organic and 45% inorganic fractions, which are processed separately. Compost and biogas are produced from the organic fraction, whereas the inorganic fraction is sorted for recycling or converted into refuse-derived fuel, that is, RDF. This system eliminated the need to dispose of fresh municipal solid waste in open dumps, and Lucknow became Uttar Pradesh's first 'Zero Fresh Waste Dump' city.

44. Explanation: Gujarat's tableau secured first place in the 'Popular Choice' category based on citizens' online voting on the MyGov portal. Its theme was 'Mantra of Swadeshi – Self-Reliance – Freedom: Vande Mataram'. In this category, Uttar Pradesh's tableau, 'Culture of Bundelkhand', secured second place,

while Rajasthan's tableau, 'Golden Touch of the Desert: Golden Art of Bikaner (Usta Art)', secured third place. Among the three Services, the Assam Regiment, and among the CAPF/other auxiliary forces, the CRPF, were selected as the best marching contingents in the Popular Choice category. It should be noted that Maharashtra's tableau secured first place in the separate jury category, whereas Gujarat ranked first in the MyGov Popular Choice category.

45. Explanation: The first 12 multiples of 11 = 11, 22, 33, 132

∴ Required average =

$$\frac{11 + 132}{2} = \frac{143}{2} = 71.5$$

46. Explanation: Sum of the squares of the prime numbers between 20 and 30 = $23^2 + 29^2$
= $529 + 841 = 1370$

47. Explanation: Given—the ratio of the volumes of two cubes = 1 : 125
Let the sides of the two cubes be a_1 and a_2 , respectively.

According to the question:

$$\frac{a_1^3}{a_2^3} = \frac{1}{125}$$

$$\frac{a_1}{a_2} = \frac{1}{5} = 1 : 5$$

∴ Surface area of a cube = $6a^2$

∴ Ratio of the surface areas = $1^2 : 5^2$
= 1 : 25

48. Explanation: $x = \frac{1}{x-5}$

$$x^2 - 5x - 1 = 0$$

$$x - \frac{1}{x} = 5$$

$$x + \frac{1}{x} = \sqrt{5^2 + 4} = \sqrt{29}$$

49. Explanation: Product of two consecutive prime numbers = 7387
= 83×89

The consecutive prime numbers are 83 and 89.

∴ Difference = $89 - 83 = 6$

50. Explanation:

∴ 512 is divisible by 32

∴ Required remainder = $\frac{67}{32} = 3$

51. Explanation: The psychosocial concept of health goes beyond merely the malfunctioning of physical organs, as in the biomedical model, and regards psychological, social, economic and cultural factors, along with biological factors, as important determinants of health. Therefore, Assertion (A) is true. Prevailing social customs—such as consanguineous marriage potentially increasing the risk of certain rare genetic disorders in offspring, or culturally prescribed food taboos for pregnant women increasing the risk of inadequate nutrition and malnutrition—demonstrate that sociocultural factors exert an important and multifactorial influence on health. Therefore, Reason (R) is also true and provides the correct and logical explanation of Assertion (A).

52. Explanation: Johannes Siegrist developed the 'Effort-Reward Imbalance Model' to explain workplace stress, stress-related health risks and the likelihood of illness. Erving Goffman propounded the theory of social 'stigma' associated with HIV, leprosy and mental disorders. Talcott Parsons propounded the concept of the 'sick role' from a sociological perspective. Collins Airhihenbuwa, on the other hand, developed the 'PEN-3 Model' to understand African-American health behaviour. It includes three major domains—cultural identity, relationships and expectations, and cultural empowerment. Therefore, the correct matching code is (a).

53. Explanation: Kasl and Cobb classified health-related behaviour into three distinct categories: (1) Preventive Health Behavior—behaviour undertaken by a person who considers themselves healthy to prevent disease or detect it in an asymptomatic state, such as exercise, vaccination and regular check-ups (Statement 1 is correct); (2) Illness Behavior—the process of understanding one's health condition and seeking appropriate measures, diagnosis or treatment after experiencing symptoms; consulting a physician is one form of it (Statement 2 is correct); and (3) Sick-Role Behavior—

receiving treatment, following medical advice and taking the necessary rest to recover after regarding oneself as ill (Statement 3 is correct). Therefore, all three statements are correct.

- 54. Explanation:** According to the 'Theory of Reasoned Action' developed by Ajzen and Fishbein, the most direct and primary factor governing any volitional behaviour is a person's 'Behavioral Intention'. This intention is determined by two direct determinants—attitude towards the behaviour and subjective norms: (1) the individual's own attitude towards that behaviour, and (2) Subjective Norms, that is, the perceived social pressure associated with the approval or disapproval of significant individuals or groups. When the behaviour is sufficiently under the individual's voluntary control, a strong intention increases the likelihood of that behaviour occurring.
- 55. Explanation:** In research, 'residual confounding' arises when an attempt is made to control for known confounding factors (confounders) in a statistical analysis, but part of their effect remains in the results because of incomplete measurement or excessively broad categorisation of a confounding factor—for example, measuring smoking only as 'yes/no' without measuring the quantity—or because some unknown confounders, or known but unmeasured confounding variables, are not included in the analysis. This measurement deficiency hinders the drawing of unbiased conclusions. Therefore, option (b) correctly describes it.
- 56. Explanation:** Johannes Siegrist's ERI (Effort–Reward Imbalance) model analyses the psychosocial work environment. This theory states that when an employee exerts a high level of effort at work but does not receive adequate pay, promotion, respect or job security in return (low reward), this imbalance may generate a sustained psychosocial stress response. This chronic stress greatly increases the risk of high blood pressure, heart disease and depression. Therefore, option (a) is correct.

- 57. Explanation:** The PEN-3 model developed by Collins O. Airhihenbuwa places culture at the centre of health behaviour and public health interventions. The three components of its 'Cultural Identity' domain are Person, Extended Family and Neighborhood (neighbourhood/community). This model explains that health-related behaviours and interventions are not confined to the individual alone; extended-family members, such as grandparents or mothers-in-law, and the cultural norms of the community also influence these decisions. Therefore, option (a) is correct.
- 58. Explanation:** Relative income theory explains that health is determined not only by how much an individual earns (absolute income), but is also influenced by where the individual stands in comparison with their reference group—such as the neighbourhood, workplace, occupational group or another social group. When an individual feels economically disadvantaged in comparison with others, 'relative deprivation' and a sense of social inferiority arise. This psychological stress weakens the body's immune system and harms health.
- 59. Explanation:** The interactionist perspective studies the micro-level interactions that occur within the consultation room. It shows that the doctor's medical expertise and institutional authority often exert greater influence over the direction of the interaction; complex medical terminology may widen the communication gap. The patient may express their illness in the language of experiences connected with daily life, family and social circumstances. At times, the physician reformulates the patient's account mainly in terms of biomedical symptoms and disease categories, which may result in the neglect of the patient's personal and social experiences.
- 60. Explanation:** Malnutrition is caused not only by a lack of food but also by economic, family and socio-cultural factors. In many families, patriarchal and gender-based beliefs result in women and girls receiving smaller quantities of food or food of lower

nutritional quality than that received by men. Men or boys may also be given priority in the distribution of food within the family when resources are scarce, and certain nutritious foods may be restricted during pregnancy on the basis of unscientific beliefs such as 'hot/cold'. These are important socio-cultural factors that contribute to malnutrition. Therefore, option (c) correctly represents the social influence.

- 61. Explanation:** A chronic disease—such as diabetes or high blood pressure—persists for a long period. Many chronic diseases can be controlled over the long term through regular medication, monitoring and lifestyle management; quality of life depends on the disease and its stage. In contrast, an incurable or life-limiting illness—such as end-stage cancer that cannot be controlled through treatment—is a condition that cannot be cured and from which death is expected, although the exact time of death cannot be predicted with certainty. In an incurable illness, the primary objective of care is to relieve pain and other symptoms and to maintain the patient's quality of life and dignity. Palliative care may also be provided alongside other treatments during the earlier stages of a serious illness.
- 62. Explanation:** In his sociological analysis of 'stigma', Erving Goffman explained stigma as a relationship between an attribute or condition and a social stereotype that devalues an individual's social identity. When this concept is applied in the field of health to conditions such as HIV/AIDS, leprosy, TB and mental health conditions, the affected individual begins to fear social discrimination and exclusion. Because of this fear, the patient may conceal the illness or diagnosis, delay undergoing testing and seeking treatment, and experience psychological stress, shame, despair or social isolation. This may affect testing, early diagnosis, adherence to treatment and the effectiveness of disease-control programmes.

- 63. Explanation:** Edward Burnett Tylor's major work is 'Primitive Culture' (1871). In it, he gave the minimum definition of religion as 'belief in spiritual beings' and discussed animism. L. H. Morgan presented the three broad stages of savagery, barbarism and civilisation under his unilinear evolutionary model in 'Ancient Society' (1877). A. R. Radcliffe-Brown's 'Structure and Function in Primitive Society' (1952) is a major work related to structural functionalism. In 'Patterns of Culture' (1934), Ruth Benedict discussed the patterns of different cultures and the Apollonian and Dionysian cultural configurations. Therefore, the correct matching is A-3, B-1, C-4, D-2.
- 64. Explanation:** In malaria-prone regions, individuals with the Hb^A Hb^S genotype receive relative protection, particularly against severe falciparum malaria. In contrast, the Hb^S genotype causes a severe form of sickle-cell anaemia. Thus, heterozygous individuals gain a selective advantage in a malaria-endemic environment. This is called heterozygote advantage. Because of this advantage, the Hb^S allele is not completely eliminated, and both the Hb^A and Hb^S alleles remain in the population. This is a well-known example of balanced polymorphism. This protection does not provide complete immunity; it mainly reduces the risk of severe malaria. Therefore, both Assertion (A) and Reason (R) are true, and the Reason correctly explains the Assertion.
- 65. Explanation:** In humans, females have XX sex chromosomes and males have XY sex chromosomes. All ova produced by the mother contain an X chromosome, whereas the father's sperm cells carry either an X or a Y chromosome. Fertilisation by an X-bearing sperm produces a daughter, whereas fertilisation by a Y-bearing sperm produces a son. The genes responsible for X-linked recessive disorders are located on the X chromosome. A male has only one X chromosome. Therefore, when a disease-causing recessive allele is present on that X chromosome, there is no second normal allele to mask its effect, and the disorder is expressed. For this reason, such disorders are observed more frequently in males. Hereditary red-green colour vision deficiency and haemophilia A and B are major examples. Therefore, Statement 1 is correct. A son receives the Y chromosome, not the X chromosome, from his father. Therefore, an affected father does not directly transmit his disease-causing X-linked allele to any son. He transmits the X chromosome carrying the disease-causing allele to all his daughters. If the mother is unaffected, these daughters generally become carriers. Therefore, Statement 2 is incorrect. A female who has a disease-causing allele on one X chromosome and a normal allele on the other X chromosome is called a heterozygous carrier. The normal allele usually prevents the complete expression of the disorder. However, mild symptoms may appear in some female carriers. Statement 3 is considered correct in the context of this heterozygous condition. The transmission of an X-linked allele from a father to his daughter and then to that daughter's son is called criss-cross inheritance. Therefore, the correct answer is option (b): Statements 1 and 3 only.
- 66. Explanation:** The major features of the Neolithic Age included ground and polished stone tools, such as axes, adzes and hoes. These were used for clearing land, cutting wood, digging, sowing and food processing. Agriculture, animal husbandry and settled village life were also major features of the Neolithic Age. Microliths were the principal characteristic of the Mesolithic Age. These were small and carefully manufactured tools and were found in both geometric and non-geometric forms. Therefore, describing them merely as 'rough and shapeless' is incorrect. Acheulean handaxes and cleavers were prominent in the Lower Palaeolithic Age, and Attirampakkam is an important Indian example. The Soan or Soanian tradition is generally treated separately as a pebble-tool tradition. Flake-based scrapers, points and borers were prominent in the Middle Palaeolithic Age, whereas the term Mousterian is mainly associated with the Middle Palaeolithic tradition of Europe and South-West Asia. Specialised tools such as blades and burins developed during the Upper Palaeolithic Age. Therefore, option (d) is correct.
- 67. Explanation:** Fraternal polyandry is a form of marriage in which a woman's two or more husbands are brothers. They are jointly regarded as her husbands and as members of the family. Historical references to this form of marriage are found among the Toda, the Khas/Khasa of Jaunsar-Bawar and some Himalayan-Tibetan communities in India. In many Himalayan communities, an important economic basis of this practice was to prevent the division of the family's limited land, livestock and other resources. A reduction in population growth may be a possible indirect effect, but it is not regarded as the conscious and universal objective of all communities. The form of polyandry in which the husbands are not related by blood is called non-fraternal polyandry. Therefore, option (b) is correct.
- 68. Explanation:** In humans, the foramen magnum is situated relatively anteriorly and inferiorly on the cranial base. This helps to balance the head directly over the vertebral column and is an important anatomical indicator of bipedal locomotion. In non-human apes, the foramen magnum is situated relatively posteriorly. The human vertebral column has four natural curvatures, because of which it appears 'S'-shaped when viewed from the side. These curvatures assist in standing upright, maintaining balance and absorbing shock during walking. In contrast, the vertebral column of non-human apes is generally 'C'-shaped. A distinct bony chin is a characteristic feature of modern humans, namely Homo sapiens. Therefore, the correct answer is option (b).

- 69. Explanation:** The concept of the 'Sacred Complex' was propounded by the Indian anthropologist L. P. Vidyarthi on the basis of his study of Gaya. Its three major components are sacred geography, sacred performances and sacred specialists. The 'sacred area' given in the option denotes the broader concept of sacred geography. Sacred geography includes temples, rivers, ghats, sacred tanks, trees and other sacred places. Sacred performances refer to religious activities such as worship, shraddha rites, offerings, mantra recitation, ritual bathing and festivals. Sacred specialists are individuals who provide specialised services connected with these religious activities and the pilgrimage system. Therefore, option (b) is correct.
- 70. Explanation:** In his book 'Stone Age Economics', Marshall Sahlins identified three ideal forms of reciprocity—generalised, balanced and negative reciprocity. In generalised reciprocity, no immediate or definite return is expected. In balanced reciprocity, a return of equivalent value or utility is expected within a limited period. In negative reciprocity, an individual attempts to obtain the maximum benefit without an equivalent return or at the expense of the other party. 'Market-centred reciprocity' is not an independent category in Sahlins' classification. Therefore, option (d) is correct.
- 71. Explanation:** The ABO blood group is determined by alleles inherited from the parents. The A and B alleles are codominant, whereas the O allele is recessive. Under normal circumstances, environmental factors such as climate, diet or lifestyle do not directly alter an individual's ABO genotype. Therefore, option (b) is correct. In rare diseases or under certain medical treatments, changes may be observed in the expression of ABO antigens on blood cells or in blood-group test results, but this does not eliminate the fundamentally hereditary nature of the ABO system. External traits such as skin pigmentation and cranial morphology have a genetic basis, but their phenotypic expression may also be influenced by ultraviolet radiation, prenatal conditions, development and nutrition. All living humans are members of the same biological species, *Homo sapiens*. Human racial categories are socially constructed classifications, not separate biological species.
- 72. Explanation:** A phoneme is the smallest contrastive sound unit of a particular language. It has no meaning of its own, and the ability to be pronounced independently is not an essential characteristic. Replacing one phoneme with another may change the meaning of a word. A morpheme is the smallest linguistic unit that carries meaning or performs a grammatical function. For example, "cat" is a free morpheme, whereas in "cats", "-s" is a bound morpheme indicating the plural. Natural human languages are acquired within social groups and transmitted from one generation to another through culture. Therefore, the concept of a language completely independent of its socio-cultural context is not acceptable. Hence, only Statement 2 is correct.
- 73. Explanation:** The emic perspective understands a culture on the basis of the beliefs, meanings and local cultural categories of its members. It is described as a perspective from within the culture. In contrast, the etic perspective analyses a culture on the basis of external, scientific and comparative concepts. The terms emic and etic were developed by Kenneth L. Pike and were given prominence in anthropology by Marvin Harris. Therefore, option (b) is correct.
- 74. Explanation:** Sir James George Frazer, in his book 'The Golden Bough', described two fundamental laws of sympathetic magic. The first is the law of similarity, according to which "like produces like". Magic based on this law is called imitative magic. For example, it is imagined that harming a person's effigy will cause harm to that person. The second is the law of contact or contagion, according to which objects that were once in contact continue to influence one another even after they have been separated. Magic based on this law is called contagious magic. The belief that a person can be influenced through his or her hair or nails is an example of this. Therefore, option (a) is correct.
- 75. Explanation:** Particles smaller than 2.5 microns (PM_{2.5}) penetrate the natural defence system of the human respiratory system and enter the bloodstream; therefore, statement 1 is correct. They are a direct cause of lung cancer, COPD, heart disease and stroke; therefore, statement 2 is correct. Statement 3 is incorrect because pregnant women, the elderly and children are included among the 'sensitive groups'. Owing to incompletely developed lungs and weak immunity, the adverse effects of air pollution are much greater in these groups than in other adults.
- 76. Explanation:** Under the School Health and Wellness Programme, two teachers in every school covered under the programme are trained as Health and Wellness Ambassadors. These teachers provide students with information on topics such as health promotion, disease prevention, mental health, nutrition, hygiene and safe behaviour. Therefore, A is matched with 1. The National Mental Health Policy, 2014 does not confine mental health services merely to hospitals; it emphasises reducing stigma, protecting the rights of individuals, and developing accessible, participatory and community-based services. Therefore, B is matched with 2. The National Food Security Act, 2013 is a rights-based law. Adopting a human life-cycle approach, it provides foodgrains to eligible households, nutritional support and maternity benefits to pregnant and lactating women, and age-appropriate nutritional entitlements to children. Therefore, C is matched with 3. Pradhan Mantri Jan Arogya Yojana provides eligible beneficiary families with secondary and tertiary hospitalisation cover of up to Rs 5 lakh per family

per year. Treatment at empanelled government and private hospitals is cashless, and beneficiaries can avail themselves of the benefits of the scheme at any empanelled hospital in the country. Therefore, D is matched with 4.

Thus, the correct matching is A-1, B-2, C-3 and D-4, and the correct answer is option (a).

77. **Explanation:** In India, the AQI is determined on the basis of the concentrations of eight pollutants—PM₁₀, PM_{2.5}, SO₂, NO₂, CO, O₃, NH₃ and Pb (lead); therefore, Assertion (A) is correct. Reason (R) is incorrect because greenhouse gases such as carbon dioxide (CO₂) and methane (CH₄) are not included in the AQI. Instead, the AQI is based on toxic gases and particulate matter that directly harm respiratory health. Therefore, Assertion (A) is correct, but Reason (R) is entirely incorrect.

78. **Explanation:** Huntington's disease is a genetic (hereditary) neurological disorder caused by the gradual degeneration of nerve cells in the brain; therefore, statement (c) is incorrect. It has no connection with contaminated water or infectious agents. It is an autosomal dominant disease in which even one copy of the affected gene is sufficient to cause the disease. Symptoms such as involuntary movements (chorea), cognitive decline and depression appear during adulthood. The symptoms of this disease generally appear between the ages of 30 and 50 years. However, in some cases, their onset may occur at a younger or older age.

79. **Explanation:** The 'geography of hunger' analyses the specific geographical regions and socio-economic groups in which hunger, famine and malnutrition are more deeply entrenched, and how poverty, floods and droughts, landlessness and weaknesses in the Public Distribution System are responsible for these conditions. It is not confined merely to foodgrain production but highlights multidimensional factors such as citizens' actual purchasing power, access to food and the biological absorption of food by the body.

80. **Explanation:** The Philadelphia chromosome is a somatic genetic alteration acquired during an individual's lifetime and found in chronic myeloid leukaemia (cancer). Ringworm is an infectious fungal skin disease that spreads through contact. High blood pressure (the silent killer) is a multifactorial non-communicable disease associated with obesity, stress and excessive salt consumption. Cholera is a disease caused by the bacterium *Vibrio cholerae*. It spreads through the consumption of contaminated water and food. Therefore, option (a) is correct.

81. **Explanation:** Prolonged exposure to loud noise causes hearing loss, stress, high blood pressure, insomnia and irritability. However, 'Trisomy 21' (Down syndrome) is a congenital genetic disorder characterised by the presence of three copies of chromosome 21 during foetal development; it has no connection with environmental noise pollution. Therefore, option (c) is not an effect of noise pollution.

82. **Explanation:** The National Health Mission (NHM) does not regard health merely as a medical field but emphasises improving it through the joint efforts of the departments concerned with water, sanitation, women and child development, and education; therefore, Assertion (A) is correct. The main reason for this is that the social determinants of health, such as malnutrition, contaminated water, illiteracy and child marriage, lie at the root of most communicable and non-communicable diseases, which cannot be cured merely through medication. Therefore, Reason (R) is correct and correctly explains Assertion (A).

83. **Explanation:** According to the World Malaria Report 2025 (based on 2024 data), there were an estimated 28.2 crore cases of malaria and 6.1 lakh deaths worldwide, of which 95% of the deaths occurred in the sub-Saharan African region; therefore, statement (b) is correct. Malaria is not transmitted through the air; rather, it is a disease caused by the protozoan *Plasmodium*

and is transmitted through the bite of a female *Anopheles* mosquito. The favourable tropical environment and weak health infrastructure in Africa are the principal reasons for its high burden there.

84. **Explanation:** Primary health care, delivered through PHCs/HWCs, is the foundation of public health and establishes the community's first point of contact with health services; therefore, statement 1 is correct. It focuses on disease prevention through vaccination and nutrition, health education and early screening; therefore, statement 3 is correct. Complex surgeries and organ transplants are performed in tertiary-level hospitals, such as AIIMS and medical colleges, and not at the primary level; therefore, statement 2 is incorrect.

85. **Explanation:** The most important feature of the 'Pradhan Mantri Jan Arogya Yojana' (PM-JAY) is its national portability, under which an eligible beneficiary can receive free and cashless treatment outside his or her home district at any empanelled government or private hospital located in any state of the country; therefore, statement (c) is incorrect. It includes expenses incurred up to 3 days before hospitalisation and up to 15 days after discharge.

86. **Explanation:** After a natural or human-made disaster, the loss of life and property, grief caused by losing loved ones, displacement and an uncertain future increase the risk of severe psychological trauma, fear, depression and post-traumatic stress disorder (PTSD) among affected people. In such circumstances, providing community counselling, psychosocial support and mental health services, along with relief materials, is an essential component of comprehensive public health rehabilitation. Therefore, option (a) is correct.

87. **Explanation:** Mitochondria are the energy centres of the cell and have their own distinct DNA (mtDNA). Mutations in mtDNA cause diseases such as MELAS. Since paternal

mtDNA is generally not transmitted to offspring, mitochondrial diseases are transmitted to children only through the mother's egg (maternal inheritance). Owing to energy deficiency, the brain, heart and muscles are affected the most. Therefore, all the statements are correct.

88. Explanation: Nature has a definite 'carrying capacity', within which the environment is capable of absorbing the waste and pollution generated by human activities. When population growth, uncontrolled industrialisation and the exploitation of natural resources exceed the limits of nature's replenishment capacity, the degradation of air, water, soil and biodiversity begins to accelerate. Therefore, option (a) is correct.

89. Explanation: In the context of memory, 'proactive interference' is a condition in which previously stored memories interfere with the retrieval and recall of new information, such as forgetting a new PIN because the old PIN continues to be remembered. Therefore, Assertion (A) is correct. Its fundamental cause is that strong older memories in the brain's neural pathways interfere with the encoding of new material and with retrieval cues. In contrast, in 'retroactive interference', new learning interferes with old learning. Therefore, Reason (R) is also correct and correctly explains Assertion (A).

90. Explanation: Prof. N. N. Sengupta received training in the United States and established an experimental psychology laboratory in 1915 and a department in 1916 at the University of Calcutta. Prof. Girindrasekhar Bose, who corresponded with Sigmund Freud, founded the 'Indian Psycho-Analytical Society' in 1922. Prof. Durganand Sinha divided the history of Indian psychology into four distinct phases in his 1986 book. Wilhelm Wundt established the first experimental psychology laboratory at Leipzig, Germany, in 1879. Therefore, code (a) is correct.

91. Explanation: In classical conditioning, the timing of the presentation of stimuli determines the rate of conditioning. In delayed conditioning, the conditioned stimulus (CS—such as a bell) begins first, and while it is still present, the unconditioned stimulus (UCS—such as food) is introduced; this is the most effective form. In backward conditioning, food is presented first and the bell afterwards; this is the weakest form of conditioning. In simultaneous conditioning, both stimuli are presented and terminated at the same time. Therefore, all three statements are entirely correct.

92. Explanation: Human memory is an information-processing system that functions in three sequential stages: (1) Encoding—converting external sensory information into a form that the brain can process; (2) Storage—retaining encoded information over time; and (3) Retrieval—bringing stored information back into consciousness when required. Sensory memory lasts only for a few seconds, while short-term memory lasts for 20–30 seconds without rehearsal. Therefore, option (b) is correct.

93. Explanation: Cardiologists Friedman and Rosenman classified personality into Type A and Type B. Type-A individuals are competitive, impatient, time-urgent and stressed. In contrast, Type-B individuals are calm, patient and relaxed, and lead balanced lives; they do not display aggression or haste. Therefore, option (d) is incorrectly matched. The introvert–extravert classification was proposed by Carl Jung and reflects an individual's social orientation.

94. Explanation: In Skinner's operant conditioning, an organism, such as a rat or pigeon in a Skinner box, actively interacts with the environment and voluntarily makes a response. When a specific behaviour, such as pressing a lever, earns it food or a reward through positive reinforcement, that behaviour becomes an 'instrument' for attaining the goal. In this process, the organism's own behaviour becomes the means that determines the outcome; therefore, it is called instrumental conditioning. Hence, option (b) is correct.

95. Explanation: The nucleus of a human cell contains 23 pairs of chromosomes (46 chromosomes), of which 22 pairs are autosomes and one pair (2 chromosomes) consists of sex chromosomes; therefore, statements 1 and 2 are correct. The mother has only 'XX' sex chromosomes, whereas the father has 'XY' sex chromosomes. If the sperm carries an 'X', a female child (XX) develops, and if it carries a 'Y', a male child (XY) develops. Therefore, sex is determined by the chromosome (X or Y) carried by the father's sperm, and not by the mother. Hence, statement 3 is incorrect.

96. Explanation: A psychological test is a specific, standardised and objective measuring instrument designed to measure a single trait, such as intelligence, personality or aptitude. In contrast, psychological assessment is a comprehensive and multidimensional process that forms a judgement about an individual in context by integrating test results with interviews, observation, case studies, family background and behavioural information. Therefore, a test is only one means or instrument of assessment.

97. Explanation: The 'tip-of-the-tongue phenomenon' (TOT), described in the studies of Brown and McNeill, is direct evidence of retrieval failure. In this phenomenon, a person is fully confident that he or she knows a particular name or word and that it is present in memory, but is unable to say it at that moment because the correct retrieval cues are unavailable. As soon as the first letter or a contextual cue is provided, the information is immediately recalled. Therefore, option (b) is entirely correct.

98. Explanation: According to Richard Lazarus's transactional model, stress is neither merely an external event nor merely an internal thought. It is a dynamic transaction between an individual and the environment. Stress arises when an individual appraises a situation and determines that the demands of the environment exceed the personal and social resources available to him or her. Therefore, the same challenge may be an opportunity for one person and a source of severe stress for another.

- 99. Explanation:** Substance addiction causes devastation across three dimensions—physical, psychological and social. At the biological level, it damages the liver, brain and heart and weakens the immune system. At the psychological level, it disrupts the dopamine balance and causes depression, hallucinations, irritability and aggression. At the socio-economic level, it becomes a major cause of crime, poverty, domestic violence, road accidents and family disintegration. Therefore, all the statements are correct.
- 100. Explanation:** The observation method is a fundamental method in psychology and anthropology. In ‘participant observation’, the researcher becomes a participant in the activities of the community or group being studied, thereby obtaining insider and nuanced insights. In contrast, in ‘non-participant observation’, the researcher observes and records behaviour in its natural setting from a distance, like a neutral observer, without becoming part of the group. Therefore, option (b) is correct.
- 101. Explanation:** According to Article 54, the President is elected by an electoral college. Only the elected members of both Houses of Parliament (Lok Sabha and Rajya Sabha) participate in it, not the nominated members. Therefore, statement 1 is incorrect. Only the elected members of the Legislative Assemblies of the States are included in it. Through the 70th Constitution Amendment Act, 1992, the elected members of the Legislative Assemblies of the Union Territories of Delhi and Puducherry were also included in the electoral college. Therefore, option (b) is the correct answer.
- 102. Explanation:** Article 213 empowers the Governor to promulgate Ordinances during the recess of the Legislature. Under Article 226, the High Court has the jurisdiction to issue writs for the enforcement of Fundamental Rights and other legal rights. Article 165 provides for the office of the highest law officer of the State, namely the Advocate General. Under Article 169, Parliament may, by law, provide for the creation or abolition of the Legislative Council in a State. Therefore, the matching given in option (a) is entirely correct.
- 103. Explanation:** According to Article 64, the Vice-President is the ex officio Chairman of the Rajya Sabha. According to Article 66(2), he is not a member of either House of Parliament or of any House of a State Legislature. Therefore, Assertion (A) is correct. According to Article 66(1), the Vice-President is elected by an electoral college consisting of the members of both Houses of Parliament, in accordance with the system of proportional representation by means of the single transferable vote and by secret ballot. The nominated members of the Rajya Sabha are also included in it. Therefore, Reason (R) is also correct, but it does not explain the constitutional position stated in Assertion (A). Hence, the correct answer is (b).
- 104. Explanation:** Under Article 368, a Constitution Amendment Bill may be introduced in either House of Parliament (Lok Sabha or Rajya Sabha) by a minister or a private member. The prior permission/approval of the President is not required for this; therefore, statement (b) is incorrect. The Amendment Bill must be passed by each House by a special majority, that is, a majority of the total membership of the House and a two-thirds majority of the members present and voting. In the event of disagreement between the two Houses, there is no constitutional provision for a joint sitting.
- 105. Explanation:** The principal constitutional basis of the Doctrine of Eclipse is Article 13(1). According to it, if a law enacted before the commencement of the Constitution is inconsistent with the Fundamental Rights, it does not become wholly void. It remains eclipsed and inoperative to the extent of its inconsistency with the relevant Fundamental Right. If the inconsistency is subsequently removed through a constitutional amendment, the law may again become enforceable from the date on which the inconsistency is removed. Therefore, the correct answer is Article 13.
- 106. Explanation:** According to Article 312, if the Rajya Sabha passes a resolution by a majority of not less than two-thirds of the members present and voting that it is necessary to do so in the national interest, Parliament may, by law, create new ‘All India Services’, such as the Indian Forest Service. This is one of the exclusive and special powers of the Rajya Sabha, which represents the interests of the States in Indian federalism.
- 107. Explanation:** According to Article 131, the Supreme Court has original and exclusive jurisdiction in disputes between the Government of India and one or more States, and between two or more States, where the dispute involves a question of law or fact on which the existence or extent of a legal right depends. Therefore, statements 1 and 2 are correct. A dispute concerning the validity of an election to either House of Parliament does not fall under Article 131. Such an election is challenged through an election petition, which is tried by the concerned High Court. Therefore, statement 3 is incorrect.
- 108. Explanation:** Article 358 relates only to Article 19. During the operation of a National Emergency proclaimed on the grounds of war or external aggression, Article 19 does not restrict the legislative and executive powers of the State. This effect is automatic; however, under Article 358(2), the law concerned must contain an express recital that it is related to the Proclamation of Emergency, and the executive action must be taken under that law. Under Article 359, the President may, by order, suspend the right to move any court for the enforcement of specified rights under Part III, but Articles 20 and 21 are exceptions. Therefore, option (a) is correct.

- 109. Explanation:** The Estimates Committee consists of 30 members, all of whom are elected from the Lok Sabha. The Public Accounts Committee consists of 22 members, of whom 15 are from the Lok Sabha and 7 from the Rajya Sabha. The Committee on the Welfare of Scheduled Castes and Scheduled Tribes consists of 30 members—20 from the Lok Sabha and 10 from the Rajya Sabha. The Business Advisory Committee of the Lok Sabha consists of 15 members, including the Speaker of the Lok Sabha, and the Speaker is its ex officio Chairperson. Therefore, the correct matching is A-1, B-2, C-3 and D-4.
- 110. Explanation:** According to Article 198(1), a Money Bill cannot be introduced in the Legislative Council; therefore, it can be introduced only in the Legislative Assembly. For its introduction, the recommendation of the Governor is required under Article 207(1). The Legislative Council must return the Money Bill to the Legislative Assembly with its recommendations within 14 days from the date of its receipt. The Legislative Assembly may accept or reject these recommendations. If the Legislative Council does not return the Bill within 14 days, it is deemed to have been passed by both Houses in the form in which it was passed by the Legislative Assembly. According to the first proviso to Article 200, the Governor may return only a non-Money Bill to the Legislature for reconsideration. Therefore, statements 1 and 2 are correct, while statement 3 is incorrect.
- 111. Explanation:** According to Article 37, the Directive Principles of State Policy given in Part IV are not enforceable by any court. Although they are fundamental in the governance of the country and it is the duty of the State to apply them while making laws, a citizen cannot directly secure their enforcement from the Supreme Court under Article 32 merely on the ground of their violation. The Directive Principles of State Policy were inspired by the Constitution of Ireland, and their purpose is to guide the State in establishing a welfare state and social and economic democracy. Therefore, option (d) is the correct answer.
- 112. Explanation:** The Balwant Rai Mehta Committee (1957) recommended a three-tier Panchayati Raj system—Gram Panchayat, Panchayat Samiti and Zila Parishad—for democratic decentralisation. The Ashok Mehta Committee (1977) suggested a two-tier model—Mandal Panchayat and Zila Parishad—in its place. The L. M. Singhvi Committee (1986) made the major recommendations that Panchayats be granted constitutional recognition and that Nyaya Panchayats be established in order to strengthen them. Therefore, all three pairs are correctly matched.
- 113. Explanation:** Social control is not based solely on external punitive agencies such as the police or law; it is also governed by the internalised values of the individual. Therefore, Assertion (A) is true. Beliefs embedded in religion and belief systems—such as ‘God is watching everything’, one must face the consequences of one’s actions, and the concepts of heaven and hell—establish a form of moral policing within the individual. This feeling keeps the individual away from immoral acts without any external fear. Therefore, Reason (R) is also true and correctly explains Assertion (A).
- 114. Explanation:** E. A. Ross systematised the concept of social control through his book *Social Control* (1901) and popularised it in sociological discourse. Carl Hovland and his associates experimentally studied the effects of military orientation and training films on the knowledge, opinions, attitudes and motivation of soldiers during the Second World War. The neo-evolutionist Leslie White regarded the energy harnessed per capita and the efficiency of the technological means used to utilise it as the principal basis of cultural evolution. Herbert Spencer established an analogy between society and a biological organism and regarded social evolution as a process of movement from a simple and undifferentiated structure to a complex and differentiated structure. Therefore, A-1, B-2, C-3, D-4 and code (a) are correct.
- 115. Explanation:** In health sciences, the social consequences of a disease are understood in a definite logical sequence. First, ‘disease’ arises as a biological disturbance in the body. The actual loss or damage to an organ or tissue caused by the disease is called ‘impairment’. The inability to perform normal daily physical activities because of the impairment is called ‘disability’. The inability to perform one’s normal role in society because of this disability is called ‘handicap’. Therefore, option (a) presents the correct sequence.
- 116. Explanation:** When new information contradicts an individual’s established ideas, psychological tension or dissonance arises. To protect their beliefs, individuals resort to three selective mechanisms: (1) selective exposure—listening only to sources that are consistent with their views; (2) selective perception—distorting the meaning of inconsistent information to interpret it according to their own views; and (3) selective retention—remembering only supportive information and forgetting contradictory facts. Therefore, all three components are included.
- 117. Explanation:** Tesser’s (1993) studies established that some attitudes, such as preferences relating to music, sports or politics, are influenced not only by social learning but also, to a subtle extent, by genetic constitution. Studies found that even when identical twins born from the same zygote are brought up in different families, their attitudes show a greater degree of similarity than those of fraternal twins. Therefore, option (b) presents the correct answer.
- 118. Explanation:** In classical conditioning, a neutral stimulus (CS) is repeatedly presented with a naturally pleasant stimulus (UCS). In advertisements, a new neutral brand, such as a new toothpaste, is shown with a favourite star of the public, who serves as the naturally pleasant stimulus. Through repeated association, a positive attitude towards that brand also develops automatically in the consumer’s mind. Receiving praise is operant conditioning, while observing others is observational learning.

- 119. Explanation:** In 1986, Gerald Corey divided counselling theories into three broad categories: (1) psychoanalytic—which emphasises the unconscious mind and the reconstruction of personality; (2) experiential and relationship-oriented—which is based on present experiences and Carl Rogers’s person-centred therapy; and (3) cognitive and behavioural—which is action-oriented and seeks to change maladaptive thoughts and behaviours. Legal, economic or political approaches are not included among the categories of counselling theories.
- 120. Explanation:** In the Indian tradition of thought, ‘Shraddha’ is the internal foundation for embodying values in life, without which moral life is impossible. ‘Svadharmacharana’, meanwhile, has a meaning much broader than caste-based rituals; it refers to faithfully performing one’s prescribed duties and responsibilities according to one’s role in society, family and position, without any deviation, as in ‘Dharmo Rakshati Rakshitah’. It represents dutifulness, which is wholly opposed to selfishness. Therefore, option (b) is true.
- 121. Explanation:** Modern globalisation and information technology, such as e-mail, smartphones and cloud-based software, have made business communication rapid and transparent. This helps companies enter new markets, resolve customers’ problems immediately, reduce internal operating costs and raise employee morale through transparent communication. During pandemics such as COVID-19, this effective digital communication system also enabled work-from-home arrangements to operate successfully. Therefore, option (a) is correct.
- 122. Explanation:** Classical evolutionists such as Comte, Spencer and Tylor, following the model of biological evolution, believed that all human societies continuously progress along the same straight line from a simple/primitive stage to a complex/specialised stage. In contrast, neo-evolutionists such as V. Gordon Childe, Julian Steward and Leslie White rejected unilinear evolution. They adopted a multilinear model, undertook evidence-based analysis and regarded ‘per capita energy harnessing’ and ‘technological efficiency’ as the actual measures of evolution.
- 123. Explanation:** Socialisation is a lifelong process through which an individual learns the culture, habits and values of society and becomes its functioning member. The family is the child’s first school, where the child learns primary values such as affection, truth and cooperation from the parents; therefore, statements 1 and 2 are true. However, educational institutions do not provide only bookish knowledge; they also teach secondary values such as cooperation, equality and civic consciousness through co-curricular activities, discipline, group spirit and sports. Therefore, statement 3 is incorrect.
- 124. Explanation:** Modern counselling is not confined to any one age group or problem. It is useful at every stage of the life cycle—in addressing learning problems among children, addiction and identity crises among adolescents, career and marital counselling among young people, and loneliness and depression among the elderly. It may be short-term, for crises, or long-term, for personality development. Its formats include individual, couple, family and group counselling. Therefore, option (b) is true.
- 125. Explanation:** According to the Safety-Valve Theory, the British official A. O. Hume founded the Congress to provide a non-violent outlet to the intense discontent developing among Indians; therefore, statement 1 is correct. The Extremist leader Lala Lajpat Rai, in his book ‘Young India’, used this theory to attack the Moderates’ policy of constitutional petitioning; therefore, statement 2 is correct. Historian Bipan Chandra stated in his book that the Congress leaders used Hume like a lightning conductor. Therefore, this statement is not by Bipin Chandra Pal. Hence, statement 3 is incorrect.
- 126. Explanation:** In 1908, Prafulla Chaki and Khudiram Bose made an unsuccessful attempt to assassinate the tyrannical judge Kingsford at Muzaffarpur. The Kakori train robbery of 9 August 1925 was successfully carried out by Ram Prasad Bismil and Ashfaqulla Khan of the HRA, along with their other associates. In 1909, the assassination of Jackson at Nasik was carried out by Anant Kanhere, a member of Abhinav Bharat, for which he was tried in 1910 in what came to be known as the Nasik Conspiracy Case. In 1930, Surya Sen (Masterda) successfully led the Chittagong Armoury Raid under the Indian Republican Army.
- 127. Explanation:** Under the Montagu–Chelmsford Reforms (the Act of 1919), the provincial executive was divided into two parts, and the system of dyarchy was introduced (Assertion (A) is correct). The principal reason was that important reserved subjects such as revenue, justice and police were retained by the Governor and his Council, whereas transferred subjects such as education and health were entrusted to elected Indian ministers (Reason (R) is correct). Therefore, Reason (R) is the correct explanation of Assertion (A).
- 128. Explanation:** The Dhamek Stupa is located at Sarnath near Varanasi in Uttar Pradesh, where the Buddha delivered his first sermon (‘Dharmachakrapravartana’) to his first five disciples after attaining enlightenment; therefore, option (b) is correct. The stupa was constructed and expanded in different phases. It was possibly constructed during the reign of Emperor Ashoka, and a carved stone casing was added to it during the Gupta period. Scholars differ regarding when it acquired its present external form.
- 129. Explanation:** The Moderates (Dadabhai Naoroji, R.C. Dutt and Gopal Krishna Gokhale) strongly opposed the uncontrolled entry of foreign capital into India because they believed that it exploited India’s natural resources and made the country economically dependent; therefore, statement (c) is incorrect. They made it clear that India’s poverty was not natural but was a direct consequence of colonial economic policies and the ‘Drain of Wealth’ from India to Britain.

- 130. Explanation:** The Shulba Sutra is an extremely important text under the Kalpa Vedanga that describes precise geometrical and mathematical measurements for the construction of sacrificial altars and fire-pits; therefore, option (b) is correct. It is regarded as the earliest authentic source of ancient Indian mathematics and geometry.
- 131. Explanation:** The fall of the Bastille fortress on 14 July 1789 was a decisive and symbolic event in the French Revolution. Mahatma Gandhi returned to India from South Africa on 9 January 1915 (Pravasi Bharatiya Divas). The Muslim League was founded in Dhaka on 30 December 1906 under the leadership of Nawab Salimullah and Aga Khan. The revolutionary organisation HRA was founded at Kanpur in October 1924 by Sachindranath Sanyal, Jogesh Chandra Chatterjee and Ram Prasad Bismil.
- 132. Explanation:** The mention of the Gayatri Mantra is not confined to the Third Mandala of the Rigveda; it is also repeated in various Samhitas of the Yajurveda and the Samaveda; therefore, statement (d) is incorrect. It was composed by Maharishi Vishwamitra for the worship of the Sun God ('Savita'), the symbol of knowledge and light.
- 133. Explanation:** The Benares Session of 1905 was held under the presidency of Gopal Krishna Gokhale (statement 1 is correct). Lord Curzon's decision to partition Bengal was strongly condemned at this session (statement 2 is correct). The goal of Purna Swaraj was not adopted at this session but at the historic Lahore Session of 1929 (President: Jawaharlal Nehru). Therefore, statement 3 is incorrect.
- 134. Explanation:** In the Dravidian style of South Indian temple architecture, the stepped pyramidal tower built above the main sanctum is called the 'Vimana'; therefore, option (b) is correct. In the North Indian Nagara style, it is called the 'Shikhara'. In the Dravidian style, the massive entrance gateways are called 'Gopurams', while the main assembly hall of the temple is called the 'Mandapa'. A crown-like structure at the uppermost part of the Vimana is called the 'Shikhara' in the South Indian style.
- 135. Explanation:** The Yajurveda has two branches: Shukla and Krishna. The Shukla Yajurveda contains only mantras, while the prose explanations are separate; therefore, option (c) is correct. In the Krishna Yajurveda, the mantras and their prose explanations are intermixed. The 'Vajasaneyi Samhita' refers to the Shukla Yajurveda, not the Krishna Yajurveda. The Yajurveda was composed in both prose and verse and was associated with the 'Adhvaryu' priest, who was responsible for the physical conduct of the sacrifice.
- 136. Explanation:** The Moderates had unwavering faith in the British sense of justice. They did not demand the complete overthrow of British rule or the complete withdrawal of the British army; rather, they favoured self-government and reforms. Therefore, option (d) is the incorrect statement and hence the correct answer. Their principal demands were the Indianisation of the higher services, the holding of the Civil Service Examination in India, the separation of the judiciary from the executive and a reduction in military expenditure.
- 137. Explanation:** In early Buddhist art at Sanchi and Bharhut, the Buddha was represented only through symbols such as the Bodhi tree, the Dharmachakra, footprints or an empty throne. During the Kushana period, images of the Buddha in human form began to be made for the first time in the Gandhara and Mathura schools of art. This change resulted from the rise of Mahayana Buddhism, in which the Buddha was regarded as a divine figure and began to be worshipped. Therefore, option (b) is correct.
- 138. Explanation:** Gandhiji's first successful Satyagraha in India was the Champaran Satyagraha of 1917, which aimed to free the indigo cultivators of Bihar from the exploitative 'Tinkathia system' imposed by European planters (option (a) is correct). The Ahmedabad Mill Strike of 1918 concerned the 'plague bonus' of cotton-mill workers, during which Gandhiji undertook a hunger strike. It was Mahatma Gandhi's first hunger strike in India. In 1915, he established his first Satyagraha Ashram at Kochrab in Ahmedabad.
- 139. Explanation:** Value added refers to the additional value created by a production unit through the use of intermediate goods and services. It is obtained by subtracting intermediate consumption from the total value of output. For example, if a producer uses raw materials and other intermediate services to produce final or semi-finished output of a higher value, the difference between the two values constitutes the producer's value added. Adding the value added by all production units avoids double counting because the value of intermediate goods is not counted repeatedly at different stages.
- 140. Explanation:** In disguised unemployment, a person appears to be employed, but their marginal productivity is zero or negligible. If some of these workers are removed, there is no significant reduction in total output. This situation is particularly evident in India's agricultural sector, where more people are employed than are required for the available work. It is not open unemployment because the person formally appears to be employed. The problem is the low-productivity utilisation of labour, which can be reduced through agricultural diversification and alternative employment.
- 141. Explanation:** Gross Domestic Product at market prices is the sum of the market value of final goods and services produced within the domestic territory of a country during an accounting year. The term "gross" means that depreciation, that is, consumption of fixed capital, has not yet been

deducted. The term “domestic” means that the basis is the economic territory of production, not the residence of the producer. The term “market prices” means that the effects of indirect taxes and subsidies are included. Intermediate goods are not added separately because doing so would result in double counting. The income of normal residents and income from abroad relate to the national concept.

142. Explanation: Statement 1 is correct because the Lorenz curve presents income distribution graphically. Statement 2 is also correct because the Gini coefficient measures the same inequality numerically on a scale from zero to one. Statement 3 is incorrect. The farther the Lorenz curve is from the line of perfect equality, the more unequal the distribution is. Therefore, an increase in distance indicates inequality, not equality. Understanding both indicators together clarifies both the graphical and mathematical aspects of distribution.

143. Explanation: Income is an important indicator of an individual's purchasing power, but it does not always reflect the actual availability of nutrition, education, health, sanitation, housing and basic amenities. A family may be above the income threshold and yet remain deprived of several essential services. The Multidimensional Poverty Index addresses this limitation by jointly considering indicators of health, education and standard of living. Therefore, the Reason explains why income-based measurement alone is insufficient. Both the Assertion and the Reason are true, and the Reason is the correct explanation of the Assertion.

144. Explanation: In the Human Development Report 2025, based on data for 2023, Iceland ranked first with a Human Development Index value of 0.972. Norway and Switzerland jointly ranked second with the same value of 0.970. Denmark ranked fourth with 0.962, while Germany and Sweden jointly ranked fifth. This ranking is

based on a composite index of health, education and standard of living. India and Bangladesh jointly ranked 130th with a value of 0.685.

145. Explanation: According to the National Multidimensional Poverty Index 2023, Uttar Pradesh's score on the National Multidimensional Poverty Index was 0.103. The value 0.069 was India's value on the Global Multidimensional Poverty Index for 2019–21, while 0.283 was India's value for 2005–06. The value 0.475 is India's Inequality-adjusted Human Development Index value. Uttar Pradesh's score of 0.103 indicates the combined effect of the incidence and intensity of multidimensional poverty.

146. Explanation: Deducting depreciation from Gross Domestic Product at market prices gives Net Domestic Product at market prices. Thereafter, deducting net indirect taxes gives Net Domestic Product at factor cost. Combining the two adjustments gives: Net Domestic Product at factor cost = Gross Domestic Product at market prices – depreciation – net indirect taxes.

Net factor income from abroad has not been added to it; therefore, it is still a domestic aggregate, not a national aggregate. To obtain national income, net factor income from abroad must be added to it.

147. Explanation: According to the National Multidimensional Poverty Index 2023, Bihar's multidimensional poverty headcount ratio was 33.76 per cent, the highest among all states. In Uttar Pradesh, this ratio was 22.93 per cent. Multidimensional poverty does not mean merely low income but simultaneous deprivation across indicators of health, education and standard of living. Therefore, to understand a state's multidimensional poverty situation, it is important to consider not only per capita income but also the availability of nutrition, schooling, sanitation, housing, electricity and other amenities.

148. Explanation: The Lorenz curve presents income distribution graphically, whereas the Gini coefficient expresses inequality as a numerical value. A Gini value of zero represents Absolute equal income distribution, while a value of one represents Absolute unequal income distribution. Both tools measure the same phenomenon—distributional inequality—in different forms. The Lorenz curve assists in visual comparison, whereas the Gini coefficient facilitates numerical comparison among countries, states or time periods. Therefore, the correct matching is A-2, B-4, C-3 and D-1.

149. Explanation: In the Human Development Report 2025, countries are classified into four categories on the basis of their Human Development Index values. A value of 0.800 or above indicates very high human development, 0.700 to 0.799 indicates high human development, 0.550 to 0.699 indicates medium human development, and less than 0.550 indicates low human development. This classification assists in comparing the combined achievements of countries in the three dimensions of health, education and standard of living. India's value is 0.685; therefore, it falls within the medium human development category and is close to the threshold of 0.700 for the high human development category.

150. Explanation: In monetary or nominal Gross Domestic Product, goods and services are valued at the current prices prevailing in the same year. Therefore, it includes the effects of increases or decreases in prices along with changes in the volume of production. If prices rise, monetary Gross Domestic Product may increase even when the actual volume of production remains unchanged. In contrast, real Gross Domestic Product is valued at the constant prices of the base year, thereby separating the effect of inflation and enabling a more accurate assessment of real growth in production.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-7

Answer key

1. (a)	2. (b)	3. (a)	4. (d)	5. (b)	6. (b)	7. (d)	8. (d)	9. (a)	10. (d)
11. (a)	12. (d)	13. (a)	14. (a)	15. (a)	16. (a)	17. (b)	18. (c)	19. (a)	20. (c)
21. (d)	22. (b)	23. (b)	24. (b)	25. (b)	26. (a)	27. (c)	28. (b)	29. (d)	30. (a)
31. (c)	32. (d)	33. (b)	34. (b)	35. (a)	36. (a)	37. (b)	38. (d)	39. (d)	40. (c)
41. (d)	42. (a)	43. (d)	44. (d)	45. (a)	46. (c)	47. (c)	48. (c)	49. (b)	50. (a)
51. (a)	52. (a)	53. (b)	54. (d)	55. (b)	56. (b)	57. (a)	58. (b)	59. (b)	60. (b)
61. (a)	62. (b)	63. (b)	64. (a)	65. (b)	66. (d)	67. (a)	68. (b)	69. (d)	70. (d)
71. (a)	72. (b)	73. (a)	74. (b)	75. (b)	76. (b)	77. (a)	78. (c)	79. (b)	80. (b)
81. (c)	82. (d)	83. (a)	84. (b)	85. (b)	86. (b)	87. (a)	88. (b)	89. (a)	90. (a)
91. (d)	92. (b)	93. (a)	94. (a)	95. (d)	96. (b)	97. (d)	98. (a)	99. (d)	100. (a)
101. (a)	102. (a)	103. (a)	104. (a)	105. (b)	106. (b)	107. (b)	108. (b)	109. (d)	110. (b)
111. (b)	112. (b)	113. (c)	114. (d)	115. (a)	116. (a)	117. (c)	118. (b)	119. (a)	120. (d)
121. (d)	122. (a)	123. (d)	124. (d)	125. (b)	126. (b)	127. (d)	128. (c)	129. (a)	130. (a)
131. (b)	132. (c)	133. (b)	134. (b)	135. (b)	136. (a)	137. (b)	138. (b)	139. (b)	140. (d)
141. (a)	142. (b)	143. (a)	144. (c)	145. (c)	146. (a)	147. (d)	148. (c)	149. (b)	150. (d)

Explanation

1. **Explanation:** In the mid-1960s, India faced a severe economic crisis. The successive severe droughts of 1965-66 and 1966-67 caused a sharp decline in agricultural and foodgrain production. In addition, the China-Indian War of 1962 and the Indo-Pakistan War of 1965 increased defence expenditure and fiscal pressure. Weak export growth, a shortage of foreign exchange and the stagnation of foreign aid further aggravated the economic crisis. Under these circumstances, the rupee was devalued in June 1966, and inflation increased. The Fourth Five-Year Plan remained deferred, and three Annual Plans were implemented from 1966-67 to 1968-69. Therefore, option (a) is correct.
2. **Explanation:** Sustainable development means meeting the needs of the present generation in such a manner that the ability of future generations to meet their own needs is not compromised. It is based on the balanced and integrated coordination of economic growth, social inclusion and environmental protection. The judicious use of natural resources, climate action, renewable energy and human welfare are its important areas of action. Therefore, option (b) is correct.
3. **Explanation:** The Minimum Support Price provides price support for crops specified by the government. The Kisan Credit Card provides timely institutional credit to eligible farmers for cultivation and related requirements. Crop insurance provides financial protection against crop losses caused by natural risks. Therefore, option (a) is correct. Other measures for farmers' welfare include agricultural credit, e-NAM, digital agricultural services and the Pradhan Mantri Kisan Samman Nidhi for eligible landholding farmer families, subject to the prescribed exclusion categories. For women, Self-Help Groups, MUDRA loans, skill training, the Ujjwala Yojana, Jan Dhan accounts and Direct Benefit Transfer to eligible beneficiaries contribute to financial inclusion and overall empowerment.
4. **Explanation:** On 19 July 1969, 14 major Indian scheduled commercial banks were nationalised. Its objective was to extend banking resources and credit to priority sectors, small borrowers and the wider population. The Monopolies and Restrictive Trade Practices Act, 1969 came into force on 1 June 1970. Its objective was to prevent the harmful concentration of economic power, control monopolies and prohibit monopolistic and restrictive trade practices. The Foreign Exchange Management Act, 1999 came into force on 1 June 2000. Upon its coming into force, the Foreign Exchange Regulation Act, 1973 was repealed. Therefore, the correct answer is option (d).
5. **Explanation:** Mendeleev arranged the elements on the basis of increasing atomic weights and similar physical and chemical properties and specifically used the formulae of oxides and hydrides as criteria. His periodic law stated that the properties of elements are periodic functions of their atomic weights. He left certain vacant spaces in his table and predicted that unknown elements corresponding to these vacant spaces would be discovered later. He gave names such as eka-boron, eka-aluminium and eka-silicon, which were subsequently identified as scandium, gallium and germanium, respectively. Therefore, option (b) is correct.
6. **Explanation:** Trypsinogen is secreted in an inactive form in pancreatic juice. In the duodenum of the small intestine, enteropeptidase, also called enterokinase, converts trypsinogen into active trypsin. Trypsin participates in protein digestion. The emulsification of fats is mainly carried out by the bile salts present in bile, and insulin secreted by the endocrine part of the pancreas lowers blood glucose, whereas glucagon raises it. Therefore, option (b) is correct.
7. **Explanation:** A salt is an ionic compound composed of cations and anions. The neutralisation reaction between an acid and a base produces salt and water; salts may also be formed through other reactions. Some salts have a fixed number of water molecules associated with their crystals; this water is called water of crystallisation. Such salts are called hydrated salts. Copper sulphate pentahydrate, $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$, is a blue hydrated salt. Therefore, all three statements are correct.
8. **Explanation:** Cholera is an acute intestinal infection; cholera outbreaks are caused by toxin-producing 'Vibrio cholerae' belonging to serogroups O1 and O139. Plague is caused by 'Yersinia pestis', and infected fleas are its principal vectors. Tuberculosis is caused by 'Mycobacterium tuberculosis', which primarily affects the lungs but may also affect organs such as the kidneys, spine and brain. Therefore, all three pairs are correct.
9. **Explanation:** Bernoulli's theorem applies along a streamline in steady, incompressible and non-viscous flow. According to it, the sum of pressure, kinetic energy per unit volume and potential energy per unit volume remains constant. In simple terms, at the same height along the same streamline and under ideal-flow conditions, static pressure decreases as velocity increases. Bernoulli's equation is useful in analysing the pressure distribution associated with the velocity distribution around an aircraft wing; however, a complete explanation of lift also includes momentum change and the deflection of airflow. Therefore, option (a) is correct.
10. **Explanation:** The liver is the largest gland in the human body and performs many important metabolic functions. Its functions include converting glucose into glycogen, converting toxic ammonia into urea and synthesising fibrinogen and several clotting factors. Thrombin converts fibrinogen into fibrin monomers; these polymerise to form the fibrin mesh of a blood clot. Vitamin K is essential for the functional activity of clotting factors II, VII, IX and X. Therefore, all three statements are correct.

11. **Explanation:** Smallpox is caused by the variola virus, which is a member of the family Poxviridae and the genus Orthopoxvirus. Edward Jenner demonstrated successful smallpox vaccination in 1796; subsequently, as a result of the WHO-led global eradication programme, the 33rd World Health Assembly formally declared the global eradication of smallpox on 8 May 1980. Dengue is a disease caused by the dengue virus, whose principal vector is the infected female 'Aedes aegypti'; 'Aedes albopictus' may also act as its vector. The platelet count may decrease in dengue. Therefore, option (a) is correct.
12. **Explanation:** Retting is an extremely important process in the post-harvest technology of jute. Jute is harvested at the age of 110-120 days. Thereafter, the plants are allowed to rot in water; this process is called retting. It is a microbial process. A temperature of 34 degrees Celsius is considered ideal for retting. If retting is not carried out properly, the quality of the fibre is affected. Therefore, all three statements are correct.
13. **Explanation:** In agricultural marketing, four types of utility are created in products—form, place, time and possession utility. Form utility is created through processing, such as producing sugar from sugarcane or flour from wheat. Place utility is created through transportation, time utility through storage and possession utility through the transfer of ownership by means of buying and selling. Therefore, when the form of a product is changed to make it more useful, it is an example of form utility.
14. **Explanation:** The Economic Threshold Level is an extremely important concept in Integrated Pest Management. It is the level preceding the Economic Injury Level at which pest-control measures should be initiated so that the pest population does not reach the Economic Injury Level. The Economic Threshold Level is always lower than the Economic Injury Level. The General Equilibrium Position represents the long-term average population of pests, whereas the Damage Boundary is the lowest measurable level of crop damage.
15. **Explanation:** Paris Green is an inorganic arsenite insecticide. It is a mixture of copper acetate and copper arsenite. It was first used against the Colorado potato beetle in 1867. Copper acetoarsenite is stated to be banned in India. Sulphur is mainly a fungicide and acaricide, that is, it is useful for killing mites. Therefore, option (a) presents the correct fact relating to an inorganic insecticide.
16. **Explanation:** The Arabian Sea branch of the south-west monsoon generally reaches the Kerala coast around 1 June. Its sudden arrival is called the burst of the monsoon. This branch strikes the windward side of the Western Ghats and causes heavy rainfall. After crossing the Western Ghats, the winds descend and become warmer, resulting in less rainfall in the eastern region, which is called the rain-shadow region. Therefore, option (a) is correct.
17. **Explanation:** At the global level, the American agricultural scientist Norman Ernest Borlaug is regarded as the Father of the Green Revolution. His principal area of work was Mexico, and he received the Nobel Peace Prize in 1970. Dr M. S. Swaminathan is known as the Father of the Green Revolution in India. The term 'Green Revolution' was used by William S. Gaud in his speech of 8 March 1968. Therefore, option (b) is correct.
18. **Explanation:** Chitrakote or Chitrakote Waterfall is situated on the Indravati River in Chhattisgarh and is called the 'Niagara of India'. Jog or Gersoppa Falls is situated on the Sharavati River in Karnataka. Dhuandhar and Kapildhara Falls are situated on the Narmada River in Madhya Pradesh. Shivanasamudra Falls is situated on the Kaveri River in Karnataka. Therefore, option (c) is correct.
19. **Explanation:** Dhupgarh is the highest peak of the Satpura Range, with a stated elevation of 1,350 metres. It is situated in the Mahadeo Hills. The Satpura Hills extend across the states of Gujarat, Maharashtra, Madhya Pradesh and Chhattisgarh. Guru Shikhar is the highest peak of the Aravalli Range, Kalsubai is the highest peak of the northern Sahyadri, and Japfu Peak is situated in Nagaland. Therefore, the correct answer is option (a).
20. **Explanation:** India is considered to have its shortest land boundary with Afghanistan, the length of which is given as 106 kilometres. The boundary with Bhutan is 699 kilometres, with Myanmar 1,643 kilometres and with Nepal 1,751 kilometres. Therefore, on the basis of boundary length, option (c) is correct.
21. **Explanation:** The hydrosphere covers approximately 71 per cent of the Earth's surface. Of the total water found on Earth, the saline water of the oceans constitutes approximately 97 per cent, whereas fresh water constitutes only approximately 3 per cent. The oceans are the largest component of the hydrosphere, and the Pacific Ocean is stated to be the world's largest ocean. Therefore, all three statements are correct. Hence, the correct answer is option (d).
22. **Explanation:** The Palk Strait and the Gulf of Mannar are situated between India and Sri Lanka. Sri Lanka is India's island neighbour located across the sea to the south. The Maldives is situated in the Indian Ocean to the south of Lakshadweep. Coco Strait lies between Myanmar's Coco Islands and North Andaman, whereas the Great Channel (6° Channel) lies between Sumatra and Great Nicobar. Therefore, in the context of India and Sri Lanka, option (b) is correct.
23. **Explanation:** In May 1934, at Ranchi, the Swaraj Party presented a concrete plan and a formal proposal for convening a Constituent Assembly representing all sections while supporting India's right to self-determination. A few days later, at Patna, the All India Congress Committee approved this policy, and the scheme of a Constituent Assembly became the official policy of the Indian National Congress. Therefore, the correct answer is option (b).
24. **Explanation:** In the Preamble to the original Constitution, India was declared a 'Sovereign Democratic Republic'. Through the 42nd Constitution Amendment Act, 1976, the words 'Socialist' and 'Secular' were added, declaring India a 'Sovereign Socialist Secular Democratic Republic'. Through the same amendment, in the

part relating to fraternity, the expression 'unity of the Nation' was replaced by 'unity and integrity of the Nation'. These changes relating to the Preamble came into effect on 3 January 1977.

- 25. Explanation:** Uttar Pradesh currently has a total of 18 divisions and 75 districts. Of the present 18 divisions, Aligarh is the most recently constituted division. It was formed in 2008 by bifurcating the Agra Division. The Aligarh Division comprises the districts of Aligarh, Etah, Hathras and Kasganj. The Kanpur, Lucknow and Meerut divisions have the highest number of districts, with six districts each. The Kanpur Division comprises Auraiya, Etawah, Farrukhabad, Kannauj, Kanpur Dehat and Kanpur Nagar; the Lucknow Division comprises Lucknow, Hardoi, Lakhimpur Kheri, Rae Bareilly, Sitapur and Unnao; and the Meerut Division comprises Meerut, Baghpat, Bulandshahr, Ghaziabad, Gautam Buddha Nagar and Hapur.

- 26. Explanation:** India has a single and integrated judicial system, with the Supreme Court at its apex. With the commencement of the Constitution, the Supreme Court came into existence on 26 January 1950 and was inaugurated on 28 January 1950. The provisions relating to the Supreme Court are contained in Articles 124 to 147 in Chapter IV of Part V of the Constitution. The retirement age of its judges is 65 years. They are formally appointed by the President and take the oath of office before the President or a person appointed by the President for this purpose.

- 27. Explanation:** Under the Constitution of India, Uttar Pradesh has a bicameral Legislature. It consists of the Governor and two Houses—the Legislative Assembly and the Legislative Council. The executive power of the State is vested in the Governor under Article 154, and the Governor exercises it in accordance with the Constitution. The Governor is appointed by the President under Article 155. The Uttar Pradesh Legislative Assembly has a total of 403 members, whereas the Legislative Council has a total of 100 members.

- 28. Explanation:** Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A). Carlos Alcaraz completed the 'Career Grand Slam' at the youngest age by winning the Australian Open because he had previously won each of the other three Grand Slam tournaments at least once—2 US Opens, 2 Wimbledon titles and 2 French Opens. Defeating Novak Djokovic in the final reflects his achievement in this tournament; Djokovic had previously reached the Australian Open final 10 times and won on every occasion. A 'Career Grand Slam' means winning all four Grand Slam tournaments during one's career.

- 29. Explanation:** The country's first 'Bharat Ratna Dr Babasaheb Ambedkar Advocate Training and Research Centre' was inaugurated at Taloja in Navi Mumbai, Maharashtra. Alwar district of Rajasthan became the first district in the country to achieve 100% insurance coverage under the 'Insurance for All by 2047' initiative. The joint Special Forces exercise 'Khanjar-XIII' between India and Kyrgyzstan was held at Missamari, Assam. In addition, Indian-origin climate scientist Dr Veerabhadran Ramanathan was awarded the 2026 Crafoord Prize, regarded as the Nobel Prize in geosciences, for his research on super-pollutants and the Atmospheric Brown Cloud.

- 30. Explanation:** Statements 1 and 2 are correct, whereas Statement 3 is incorrect. World Wetlands Day is observed every year on 2 February to commemorate the Convention on Wetlands held at Ramsar, Iran, in 1971. The declared theme for 2026 is "Wetlands and Traditional Knowledge: Celebrating Cultural Heritage". Rather than modern infrastructure, this theme highlights the deep relationship between wetlands and the traditional knowledge of local and indigenous communities, which has contributed for generations to biodiversity conservation, water management and enhanced resilience to climate change.

- 31. Explanation:** Statement (c) is incorrect. The 'Global Teacher Award' is jointly presented by the Varkey Foundation (UK)

and the United Nations Educational, Scientific and Cultural Organization (UNESCO), not by the UNDP. Indian teacher Roubie Nagi was selected from among more than 5,000 nominations from 139 countries and presented with this award by the Crown Prince in Dubai. She will use the prize money of 10 lakh US dollars (approximately ₹9 crore) for her foundation. She has established more than 800 learning centres for underprivileged children and has promoted education through interactive paintings.

- 32. Explanation:** All three statements are correct. SAIL, a Maharatna public sector undertaking and India's largest steel-producing company, has been certified as a 'Great Place to Work' by the Great Place to Work Institute, India, for the third consecutive year (February 2026–February 2027). This certification was granted on the basis of an improvement in the TRUST INDEX score and an assessment of transparent, performance-based and employee-centric human resource initiatives such as 'SAIL DARPAN'.

- 33. Explanation:** Renowned climate scientist of Indian origin Dr Veerabhadran Ramanathan was awarded the 2026 Crafoord Prize in Geosciences, widely regarded as the 'Nobel Prize in Geosciences', for his decades of outstanding research on super-pollutants and Atmospheric Brown Clouds. While working at NASA in 1975, he discovered that chlorofluorocarbons (CFCs) trap heat 10,000 times more effectively than carbon dioxide. He also played a leading role in the Indian Ocean Experiment (INDOEX).

- 34. Explanation:** The Forward Linkage Scheme in the North-Eastern Region was launched during the Eleventh Five-Year Plan to supplement and support the initiatives of the National Rural Health Mission. Its objective was to strengthen health infrastructure, including secondary- and tertiary-level healthcare facilities, in the North-Eastern States. The scheme also continued during the Twelfth Five-Year Plan. Therefore, option (b) is correct.

- 35. Explanation:** The major objectives of Behaviour Change Communication include increasing health awareness, dispelling myths and misconceptions, motivating people to adopt and maintain healthy behaviour, and increasing the demand for and utilisation of health services. It uses evidence-based, simple messages tailored to the target community. Therefore, option (a) is correct.
- 36. Explanation:** Under the Pradhan Mantri Surakshit Matritva Abhiyan, pregnant women are provided free, assured, comprehensive and quality antenatal care on the 9th of every month. During the second or third trimester of pregnancy, they are examined at least once by a physician or specialist. This enables the early identification, appropriate management, referral and follow-up monitoring of high-risk pregnancies. On the Mother and Child Protection Card, a green sticker indicates that no risk factor has been identified, whereas a red sticker indicates a high-risk pregnancy. Therefore, option (a) is correct.
- 37. Explanation:** The success of social mobilisation is not assessed merely on the basis of crowd size, the number of posters or programmes, or budget expenditure. These provide information about the activities and reach of the campaign. Actual success is determined by whether the knowledge and attitudes of the community have improved, whether the desired behaviour has been adopted, and whether community participation in planning, implementation and monitoring has increased. Therefore, option (b) is correct.
- 38. Explanation:** Firoz Shah Tughlaq constructed numerous canals, cities and public welfare institutions. He waived the Taqavi loans granted to peasants during the reign of Muhammad bin Tughlaq. He established the Diwan-i-Khairat department for the marriage of poor Muslim girls and to provide assistance to widows and orphans. He was the first Muslim ruler to impose jizya on Brahmins, and he levied an irrigation tax known as 'Haq-i-Sharb'. Therefore, all the statements are correct.
- 39. Explanation:** Akbar introduced several religious and administrative reforms—he abolished the pilgrimage tax in 1563 AD, the jizya tax was abolished in 1564 AD, and the Ibadat Khana was established in 1575 AD. Din-i-Ilahi was established in 1582 AD. The year 1571 AD is associated with the establishment of Fatehpur Sikri and the transfer of the capital.
- 40. Explanation:** The Great Bath is one of the most prominent architectural achievements of the Harappan Civilisation, and evidence of it has been found at Mohenjo-daro. The bathing tank constructed at its centre is stated to have a north-south length of 11.88 metres, a width of 7.01 metres and a depth of 2.43 metres. Kalibangan is notable for its ploughed field and fire altars, Lothal for its dockyard, and Banawali for a replica of a plough. Therefore, the correct answer is Mohenjo-daro.
- 41. Explanation:** Sher Shah Suri is regarded as the forerunner of Akbar as an empire-builder and administrator. He introduced the Qabuliyat and Patta systems in revenue administration. In the currency system, he issued the silver Rupiya and a copper coin called the Dam. For land measurement, he used the 30.36-inch Gaz-i-Sikandari and a hemp rod. In 1541 AD, he re-established Pataliputra under the name Patna. Therefore, all the statements are correct.
- 42. Explanation:** During Akbar's reign, land was divided into four categories on the basis of continuity of cultivation or the period for which it remained fallow—Polaj, Parauti, Chachar and Banjar. This classification was related to agriculture and the assessment of land revenue. The terms Khalsa-Jagir were related to administrative and revenue tenure, Khut-Qanungo to revenue officials, and Tanab-Jarib-Gaz to land measurement. Therefore, option (a) is correct.
- 43. Explanation:** In the account relating to Sudarshana Lake, Pushyagupta during the reign of Chandragupta Maurya, Tushaspa during the reign of Ashoka, Suvishakha during the reign of Rudradaman, and Chakrapalita during the reign of Skandagupta were associated with the construction or renovation of Sudarshana Lake. Harishena was Samudragupta's Sandhivigraha and court poet and composed the Prayaga Prashasti.
- 44. Explanation:** The Hunter Commission was constituted in 1882 AD for the development of primary education. The University Commission was constituted in 1902 AD under the chairmanship of Thomas Raleigh. The Simon Commission was appointed in 1927 AD under the chairmanship of John Simon to review the Act of 1919. The Whitley Commission was constituted in 1929 AD to examine the condition of workers. The investigation into the relations between the princely states and the British Government was associated with the Butler Committee of 1927.
- 45. Explanation:** $\therefore x + \frac{1}{9x} = 3$
- or $3x + \frac{1}{3x} = 9$
- $\therefore 9x^2 + \frac{1}{9x^2} = (9)^2 - 2$
- $= 81 - 2 = 79$
- 46. Explanation:** Required number of bricks
- $$= \frac{\text{Volume of wall}}{\text{Volume of one brick}}$$
- $$= \frac{14 \times 0.125 \times 5}{0.0014}$$
- $= 6250$
- 47. Explanation:**
- Divisor = Quotient $\times$ 13 = Remainder $\times$ 6
- $= \text{Quotient} \times 13 = 39 \times 6$
- $= \text{Quotient} = 18$
- $\therefore \text{Divisor} = \text{Quotient} \times 13$
- $= 18 \times 13 = 234$
- $\therefore \text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$
- $= 234 \times 18 + 39$
- $= 4212 + 39 = 4251$
- 48. Explanation:** Volume of a cube = (side)³
- Side $\times$ Side $\times$ Side = Volume
- Original $\rightarrow 10 \times 10 \times 10 = 1000$
- Modified $\rightarrow x \times x \times x = 72.9\%$ of 1000
- $x^3 = 729$
- $\therefore x = 9$
- $\therefore$ Percentage decrease in the side of the cube = $\left(\frac{10-9}{10} \times 100\right)\% = 10\%$
- Therefore, the side of the cube decreases by 10%.

49. **Explanation:** Let the larger part = x
 $\therefore$ Smaller part = $25 - x$
 According to the question,
 $(25 - x) \times 4 + 6x = 130$
 $100 - 4x + 6x = 130$
 $2x = 30$
 $x = 15$
 Therefore, the larger part = 15
50. **Explanation:**
 Dividend = Quotient $\times$ 10 = Remainder $\times$ 5
 $=$ Quotient $\times$ 10 = 12×5
 $\therefore$ Quotient = 6
 $\therefore$ Divisor = Quotient $\times$ 10 = $6 \times 10 = 60$
 $\therefore$ Dividend = Divisor $\times$ Quotient + Remainder
 $= 60 \times 6 + 12 = 372$
51. **Explanation:** In occupational epidemiology, the 'healthy worker effect' is an established phenomenon in observational studies. When compared with the general population, an employed group may appear healthier on average because of selection into employment; describing it as 'more disease-free' is excessively broad. Therefore, Assertion (A) is true. The fundamental reason is that the general population also includes individuals who are outside the workforce because of illness or disability; old age alone is not the fundamental cause of this bias, as relatively healthy and work-capable individuals are more likely to enter employment and remain employed. In addition, unhealthy workers leaving their jobs or moving to less hazardous work may also produce the 'healthy worker survivor effect'. Therefore, Reason (R) is also true and provides the correct and logical explanation of Assertion (A).
52. **Explanation:** Effect modification occurs when the relationship between the main exposure and disease varies according to the level of a third factor, namely the effect modifier. The central meaning of Statement 1 is correct; however, effect modification is not considered in every situation to be necessarily biological or exclusively a qualitative change. For example, asbestos and smoking separately increase the risk of lung cancer, but when both are present together, the risk of cancer may be greater than the sum of their individual risks (Statement 2 is correct). This is not confounding, but

observed effect modification does not automatically constitute evidence of a definite biological mechanism in every case. Rather than eliminating it, it is identified and stratum-specific results are presented; a larger sample merely increases detection and precision. Therefore, Statement 3 is incorrect.

53. **Explanation:** In health and gender studies, the 'gender paradox' is a well-established paradoxical situation. According to it, the combined effects of biological, behavioural, social and healthcare-related factors result in women having a higher average life expectancy than men, meaning that they live longer. However, owing to greater longevity, the nature of diseases, and the combined effects of biological, behavioural and social factors, women, on average, spend more years—and, on many health indicators, a greater proportion of their lives—with illnesses, chronic morbidities and physical disabilities. This demonstrates that life expectancy alone is not an adequate indicator; healthy life expectancy is also important, while quality of life and health equity are essential.
54. **Explanation:** The National Centre for Vector Borne Diseases Control administers the umbrella programme known as the National Vector Borne Disease Control Programme. It is implemented in the States and Union Territories under the National Health Mission. These six diseases include: (1) malaria, (2) lymphatic filariasis, (3) kala-azar, (4) Japanese encephalitis, (5) dengue, and (6) chikungunya. Strategies involving surveillance, integrated vector control, early diagnosis and treatment, public awareness, and disease-specific prevention are adopted for these diseases. Therefore, option (d) is entirely correct.
55. **Explanation:** Locavorism is a consumer approach that gives preference to locally or regionally produced food; environmental, economic and health-related objectives may be associated with it. It means giving priority to the consumption of food produced locally or regionally in one's surrounding area, particularly

fresh and seasonal food. There is no universal distance limit for this; 100 miles is merely a popular benchmark. This tendency may reduce the transport required, the distance travelled and the associated emissions involved in bringing food from distant places, but the total carbon footprint does not necessarily decrease. It may provide economic support to local farmers, while the fact that food is local does not in itself guarantee that it is unprocessed, more nutritious or environmentally superior.

56. **Explanation:** Under the Pradhan Mantri Jan Arogya Yojana, which provides health assurance cover of up to ₹5 lakh per family per year for secondary and tertiary hospitalisation treatment, the original eligible beneficiary families were identified on the basis of the prescribed criteria of 2011. The scheme is entitlement-based, but beneficiary verification and the creation of an Ayushman Card are necessary. It targets rural deprivation categories such as households living in a one-room dwelling with kutch walls and a kutch roof, or landless households deriving a major part of their income from casual manual labour, as well as poor families belonging to the prescribed 11 occupational categories in urban areas. The 2011 criteria constitute the original basis; at present, other authorised databases of the States and additional eligible groups included subsequently are also covered.
57. **Explanation:** In a major model of decision science, three control systems influence food choice: (1) Pavlovian—which activates an automatic or conditioned response to external cues associated with food; (2) habitual—which operates relatively automatically on the basis of stimulus-response associations formed through repeatedly performed actions; and (3) goal-directed—which is based on an assessment of the potential outcome of a choice and the value of the current goal; health benefits or calorie control may be examples of this. Therefore, option (a) is the correct answer.

- 58. Explanation:** Pierre Bourdieu developed the general sociological concept of cultural capital; later scholars further developed its specific application in the field of health as cultural health capital. While economic capital (wealth/income) helps in meeting the cost of treatment, cultural capital may encompass an individual's educational qualifications, health-related knowledge, linguistic skills and acquired competencies for communicating with the medical system. Greater cultural capital may increase the likelihood of better use of health information and the adoption of preventive behaviours; actual health outcomes also depend on economic, social and institutional circumstances.
- 59. Explanation:** 'Cultural safety' is a concept that goes beyond merely acquiring knowledge of other cultures or developing cultural competence. It emphasises the identification and critical examination of power relations and historical injustices, such as colonialism, racism or ethnic discrimination, within healthcare systems, as well as self-reflection and institutional action to reduce them. Its objective is to ensure that all service recipients, particularly marginalised Indigenous and minority groups, feel respected, safe and free from discrimination while receiving medical care. The service recipient and, where relevant, their family or community determine whether the service being provided is safe for them.
- 60. Explanation:** In social epidemiology, when we observe that, on average, higher educational attainment is associated with better health, the 'third-factor' or common-cause explanation cautions that, in addition to the direct effect of education, this association may also be partially or wholly influenced by a prior common factor, whether measured or unmeasured. For example, pre-existing cognitive ability, time preference or self-regulation may influence both educational attainment and health behaviour. Therefore, inferring the pure causal effect of education solely from the observed correlation may be misleading; this does not rule out an independent effect of education.
- 61. Explanation:** The effects of genetic disorders may not be limited to biological and physical symptoms—such as the failure of blood to clot normally—but may also include 'indirect psychosocial effects'. For example, because of the fear that a child with haemophilia may be injured, the parents may impose unnecessarily excessive restrictions on the child's safe activities and social participation. Such overprotective behaviour may increase the risk of insecurity, dependence, low self-confidence and social isolation in the child. This is an indirect psychosocial effect of the disorder.
- 62. Explanation:** Cultural relativism emphasises understanding a practice within its cultural context; regarding every practice as unquestionably correct represents the position of absolute cultural relativism, whereas 'critical cultural relativism' offers a critical alternative to absolute cultural relativism. It asks: In the case of a practice within a culture—for example, a harmful social practice concerning women—who actually benefits from it and who is harmed by it? Who accepts, supports or enforces it, and why? What power relations among the various dominant groups and institutions of society lie behind it? While understanding the cultural context, it analyses internal inequality, benefits and harms, and domination.
- 63. Explanation:** The standard and comprehensive definition of health in the Preamble to the Constitution of the World Health Organization was adopted in 1946, and the Constitution came into force on 7 April 1948. "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." This definition does not restrict health to the biomedical perspective of merely being free from disease, but also incorporates mental and social well-being.
- 64. Explanation:** Bronislaw Malinowski conducted a detailed study of the formal exchange system known as the 'Kula Ring', practised among several island communities, using the Trobriand Islands as the basis of his study. In this system, shell necklaces and shell armbands were circulated in prescribed directions. F. Graebner was a major thinker of German-Austrian Kulturkreis diffusionism, while G. E. Smith was a leading exponent of British hyperdiffusionism. Franz Boas developed cultural relativism, according to which a culture should be understood not by external standards but within its own context. In A. R. Radcliffe-Brown's structural functionalism, the functions of social institutions are explained in terms of their contribution to the continuity of the social structure. Therefore, the correct matching is A-3, B-1, C-2, D-4.
- 65. Explanation:** In the ABO blood group system, gene I has three major alleles— I^A , I^B and i . Since more than two alleles of the same gene are present in the population, it is an example of multiple allelism. In the genotype $I^A I^B$, both I^A and I^B alleles are expressed codominantly. Consequently, both A and B antigens are formed on the red blood cells, producing the AB blood group. Therefore, both the Assertion and the Reason are correct. However, the Reason explains only codominance; it does not explain the presence of three alleles, that is, multiple allelism. Hence, the correct option is (b).
- 66. Explanation:** Down syndrome is generally caused by trisomy 21. It involves three copies of chromosome 21 and may be associated with intellectual and developmental delays and characteristic physical features. Turner syndrome occurs in females. Its classical karyotype is 45, X, in which one X chromosome is absent. This may result in reduced ovarian function, incomplete pubertal development and difficulty in natural conception. Klinefelter syndrome occurs in males, and its most common karyotype is 47, XXY. It involves the presence of an additional X chromosome. It may cause inadequate development of the testes, low testosterone levels, reduced fertility and symptoms such as gynaecomastia. Therefore, the correct answer is (d).

- 67. Explanation:** Bipedal locomotion is a major adaptation in human evolution. To facilitate upright walking, the pelvis became short, broad and bowl-shaped. This provided support to the internal organs and helped stabilise the pelvis and trunk during walking. The oppositely directed curvatures of the spine, particularly lumbar lordosis, gave the spine an 'S' shape and kept the body's centre of gravity balanced over the lower limbs. Lower limbs longer than the upper limbs made a longer stride and more efficient gait possible. Therefore, option (a) is correct.
- 68. Explanation:** In a joking relationship, socially sanctioned freedom to engage in humour, teasing or mockery exists between specified relatives. It may be symmetrical, in which both parties engage in joking, or asymmetrical, in which one party mainly jokes and the other is expected not to take offence. In the Indian context, *devar-bhabhi* and *jija-sali* are common examples. In contrast, an avoidance relationship involves maintaining respectful social distance. Depending on the particular society, there may be partial or complete restrictions on direct interaction, forms of address, eye contact, proximity or physical contact. Mother-in-law-son-in-law and father-in-law-daughter-in-law are common Indian examples. According to Radcliffe-Brown, avoidance and joking relationships help maintain the stability of the kinship system by controlling potential tension and conflict.
- 69. Explanation:** Burzahom and Gufkral are major Neolithic sites in the Kashmir Valley. Pit dwellings, ground and polished stone tools and bone tools have been found at these sites. Evidence of an engraved hunting scene and burials of animals, including dogs, alongside humans has been obtained from Burzahom; the engraved scene is not regarded as an example of Upper Palaeolithic painting. Iron has indeed been reported from the later Megalithic level of Gufkral, but these sites are not primarily identified as centres of iron technology. The Soanian tradition is associated with Lower Palaeolithic chopper-chopping tools, while Nevasa is associated with Middle Palaeolithic flake-dominated tools. Bagor and Langhnaj are Mesolithic microlithic sites; clear evidence of animal husbandry has been obtained particularly from Bagor. Therefore, option (d) is the incorrectly matched pair.
- 70. Explanation:** PVTGs are identified mainly on the basis of a pre-agricultural level of technology, low literacy, economic backwardness and a declining or stagnant population. Historically, the criteria for their identification were developed under the Ministry of Home Affairs; at present, the major schemes relating to them are administered by the Ministry of Tribal Affairs. India has a total of 75 PVTG communities found in 18 States and the Union Territory of the Andaman and Nicobar Islands. Odisha has 13 listed PVTG groups, the highest number in any State. The term 'Primitive Tribal Groups' was changed to 'Particularly Vulnerable Tribal Groups' in 2006. Therefore, Statements 1, 2 and 3 are correct.
- 71. Explanation:** Arnold van Gennep presented a general three-stage structure of rites of passage—
- 1. Separation:** The individual separates from their previous social status, identity or role.
 - 2. Liminality:** The individual is in an intermediate stage between the old and the new status. Their new social identity has not yet been fully established.
 - 3. Reincorporation:** The individual is formally incorporated into the new social status and assumes the rights and obligations associated with it.
- Therefore, the correct sequence is Separation → Liminality → Reincorporation. Victor Turner later studied the concept of liminality in detail.
- 72. Explanation:** Phenylketonuria (PKU) is an autosomal recessive inborn metabolic disorder. In this disorder, alterations in the PAH gene reduce or eliminate the activity of the phenylalanine hydroxylase enzyme. Consequently, the conversion of phenylalanine into tyrosine is impaired, and the level of phenylalanine in the blood begins to rise. In the absence of timely diagnosis and treatment, a high level of phenylalanine may cause permanent damage to the brain and lead to intellectual disability. Early newborn screening and a phenylalanine-restricted diet under medical supervision help prevent its serious effects. Darkening or blackening of urine upon exposure to air is associated with alkaptonuria, not PKU.
- 73. Explanation:** In ethnography, the researcher generally conducts an intensive fieldwork-based study of a particular community, group or cultural setting. On the basis of material obtained through participant observation, interviews, conversations, life histories and documents, the researcher presents a detailed description and interpretation of the community's everyday life, practices, behaviours and their cultural meanings. In contrast, ethnology compares ethnographic material obtained from different societies or cultures to analyse their similarities, differences and broader cultural patterns. Therefore, option (a) is correct.
- 74. Explanation:** The rigid or classical form of environmental determinism holds that physical environmental factors such as climate, landforms, soil and water decisively determine human behaviour, social organisation and culture. Under this perspective, human beings are regarded as relatively passive recipients of environmental influences. In contrast, possibilism emphasises the role of human choice, knowledge and technology. Julian Steward's cultural ecology empirically examines the relationship among the environment, subsistence, technology and cultural patterns. Therefore, the correct answer is (b).
- 75. Explanation:** In forensic anthropology, particularly for estimating biological sex from an adult skeleton, the pelvis is the most reliable skeletal region. The female pelvis is generally relatively broad and shallow, and its birth canal, subpubic angle and greater sciatic notch are wider. In contrast, the male

pelvis is generally relatively narrow and deep. The skull is an important supplementary indicator for estimating biological sex. Features such as the glabella or brow region, nuchal crest, supraorbital margin, mastoid process and mental eminence are assessed collectively. Finger and foot bones may also be assessed through specific metric methods, but they are generally not primary indicators. Therefore, among the given options, (b) is correct.

76. **Explanation:** According to Article 123, the President may promulgate an Ordinance when both Houses of Parliament are not simultaneously in session and immediate action is necessary. Therefore, an Ordinance may be promulgated even when only one House is not in session; hence, Statement 1 is incorrect.

While in operation, an Ordinance has the same force and effect as an Act of Parliament; therefore, Statement 2 is correct. An Ordinance is laid before both Houses of Parliament and ceases to operate at the expiration of six weeks from the reassembly of Parliament. If the two Houses reassemble on different dates, this period is calculated from the later date. To keep an Ordinance in force beyond six weeks, Parliament must enact a law in its place. In this sense, Statement 3 is correct.

77. **Explanation:** The concept of the Concurrent List in the Constitution of India was inspired by the Constitution of Australia. The principle of “procedure established by law”, mentioned in Article 21, was borrowed from Japan. The specific method of electing the President—proportional representation and the single transferable vote—was inspired by Ireland. The formal procedure for amending the Constitution under Article 368 was borrowed from the Constitution of South Africa. Therefore, the matching in option (a) is completely correct.
78. **Explanation:** Assertion (A) is correct. A joint sitting may be convened in the event of a deadlock between the two Houses over Ordinary Bills and Financial Bills—Category-I and Category-II—under Article 117. There

is no provision for a joint sitting in the case of a Money Bill or a Constitution Amendment Bill under Article 368.

Reason (R) is incorrect. A Constitution Amendment Bill must be passed separately by each House with a special majority, but the separate approval of the Rajya Sabha is not required for a Money Bill. The Rajya Sabha may only make recommendations within 14 days, which the Lok Sabha may accept or reject. Therefore, the correct answer is (c).

79. **Explanation:** The Right to Life and Personal Liberty guaranteed under Article 21 is equally available to both citizens and foreigners; therefore, Statement (b) is incorrect. Following the Puttaswamy case (2017), the Right to Privacy has been recognised as an integral part of Article 21. In *Subhash Kumar v. State of Bihar* (1991) and other judgments, pollution-free water and air and a clean environment have also been included within the Right to Life. After the 44th Constitutional Amendment, 1978, Article 21 cannot be suspended even during a National Emergency.

80. **Explanation:** The Eighth Schedule of the original Constitution contained 14 languages, and the number has now increased to 22. Four new languages—Bodo, Dogri, Maithili and Santhali—were included through the 92nd Constitution Amendment Act, 2003; therefore, statement (b) is correct. English and Rajasthani are not included among the 22 languages of the Eighth Schedule. Sindhi was added through the Constitution (Twenty-first Amendment) Act, 1967, while Konkani, Manipuri and Nepali were added through the 21st Constitution Amendment Act, 1992.

81. **Explanation:** The Chairman and members of the UPSC are appointed by the President. Their term of office is 6 years from the date on which they enter office or until they attain the age of 65 years, whichever is earlier. They submit their resignation to the President. On the ground of misbehaviour, the President can remove them only when the Supreme Court, on a reference made by the

President, conducts an inquiry and reports that they should be removed. However, the President may remove them without such an inquiry by the Supreme Court if they are adjudged insolvent, engage in paid employment outside the duties of their office, or become unfit to continue in office owing to mental or physical infirmity. The Chairman of the UPSC is not eligible for any further government employment. Another member of the UPSC may become the Chairman of the UPSC or the Chairman of a State Public Service Commission, but is not eligible for any other government employment.

82. **Explanation:** The CAG (Article 148) is the guardian of public finance in India. Under Article 151, the CAG submits its audit reports to the President, who causes them to be laid before both Houses of Parliament. The Public Accounts Committee examines the reports of the CAG; therefore, the CAG is called the ‘friend, philosopher or guide’ of this Committee. To ensure its independent functioning, the salary of the CAG is charged on the Consolidated Fund of India and is not put to vote in Parliament (statement 3 is correct). Therefore, the correct answer is (d).

83. **Explanation:** The anti-defection law was enacted by adding the Tenth Schedule through the 52nd Constitution Amendment Act, 1985. The 61st Constitution Amendment Act, 1988 amended Article 326 and reduced the minimum voting age from 21 years to 18 years. The 86th Constitution Amendment Act, 2002 inserted Article 21A and made free and compulsory education for children aged 6–14 years a Fundamental Right. The 103rd Constitution Amendment Act, 2019 provided 10% reservation to the Economically Weaker Sections (EWS) of the unreserved category.

84. **Explanation:** The words ‘Socialist’, ‘Secular’ and ‘Integrity’ were added to the Preamble by the 42nd Constitution Amendment Act, 1976 (statement 1 is correct). The Preamble is neither a source of the legislature’s powers nor does it impose any restriction on

its powers; therefore, statement 2 is incorrect. The Preamble does not itself confer any independent right enforceable by a court of law; therefore, statement 3 is correct. However, the Preamble is a part of the Constitution and serves as a guide in constitutional interpretation. Therefore, the correct option is (b).

85. **Explanation:** Under Article 67(b), a resolution for the removal of the Vice-President can be initiated only in the Rajya Sabha. It must be passed by a majority of all the then members of the Rajya Sabha, that is, an effective majority, and must be agreed to by the Lok Sabha by a simple majority (statement (b) is correct). At least 14 days' prior notice of the intention to move the resolution must be given. The Constitution does not specify any particular ground for the removal of the Vice-President from office. There is no provision for a joint sitting in this procedure.
86. **Explanation:** Under Article 215, every High Court shall be a 'Court of Record'. This has two implications: first, its judgments and proceedings are preserved as evidence and their authenticity cannot be questioned. Second, it has the power to punish for contempt of itself (Contempt of Court). Article 129 accords the status of a Court of Record to the 'Supreme Court', whereas Article 215 applies to the High Courts.
87. **Explanation:** In parliamentary procedure, there are three types of cut motions on Demands for Grants. The objective of a Policy Cut Motion is to express disapproval of the policy underlying the demand, and it proposes that the amount of the demand be reduced to ₹1; therefore, option (a) is correct. An Economy Cut Motion proposes that the amount of the demand be reduced by a specified amount. The objective of a Token Cut Motion is to highlight a specific grievance, and it proposes a reduction of ₹100 in the amount of the demand.
88. **Explanation:** An agreement was concluded between Gandhiji and Viceroy Irwin on 5 March 1931. Under this agreement, the Civil

Disobedience Movement was suspended and participation in the Second Round Table Conference was agreed upon (statement 1 is correct). The government agreed to release only those political prisoners associated with the Civil Disobedience Movement who were 'non-violent' and refused to release those convicted of violence, such as Bhagat Singh, Sukhdev and Rajguru; therefore, statement 2 is false. It was approved at the Karachi Session of March 1931, presided over by Sardar Patel (statement 3 is correct).

89. **Explanation:** Four distinct classes of priests were designated for the proper performance of Vedic sacrifices. The priest who recited the hymns of the Rigveda was called the 'Hotri'. The priest who followed the ritual rules of the Yajurveda and carried out the ritual acts of the sacrifice was called the 'Adhvaryu'. The priest who melodiously chanted the mantras of the Samaveda was called the 'Udgatri'. The chief priest who supervised the entire sacrificial procedure and rectified errors was called the 'Brahman'. In the traditional Shrauta classification of the four Vedas, the Brahman is regarded as being associated with the Atharvaveda. Therefore, option (a) is correct.
90. **Explanation:** Awadh was annexed in 1856 after Nawab Wajid Ali Shah was accused of 'misgovernment' (Assertion (A) is correct). Approximately one out of every three soldiers in the Bengal Army came from Awadh, because of which it was called the 'nursery of soldiers' (Reason (R) is correct). The annexation of Awadh dealt a severe blow to these sepoys' social prestige, financial position, owing to higher taxes on land, and sense of honour, thereby fuelling military discontent. Therefore, Reason (R) correctly explains Assertion (A).
91. **Explanation:** Mauryan pillars were certainly influenced by Iranian pillars, but they were not copies of them. Iranian pillars were made of several joined pieces of stone, whereas Ashokan pillars were carved out of a single stone and were monolithic. Moreover, Iranian pillars formed part of buildings, whereas Mauryan pillars

were independently erected in open spaces; therefore, statement (d) is false. Mauryan art developed in two distinct streams—court art, including pillars, caves and stupas, and folk art, including sculptures of Yakshas and Yakshinis.

92. **Explanation:** The Lucknow Session of 1916, presided over by Ambica Charan Majumdar, is known for two historic events. First, through the efforts of Tilak and Annie Besant, the Moderates and Extremists within the Congress were reunited (option (b) is correct). Second, the 'Congress-League Agreement', known as the Lucknow Pact, was concluded, under which the Congress formally accepted the demand for 'separate electorates' for Muslims for the first time. This agreement proved to be an important turning point in Indian politics.
93. **Explanation:** The Faraizi Movement was started by Haji Shariatullah in 1818 in Faridpur, Eastern Bengal (option (a) is correct). Initially, it was an Islamic religious and social reform movement. However, under the leadership of Haji Shariatullah's son, 'Muhammad Mohsin' (Dudu Miyan), it assumed a militant, peasant-based character. Dudu Miyan organised peasants against indigo planters and oppressive zamindars, and the Faraizis opposed illegal taxes, abwabs, zamindari oppression and coercion by indigo planters.
94. **Explanation:** The Government of India Act, 1858 transferred the administration of India directly to the British Crown. The Indian Councils Act, 1861 gave legal recognition to Canning's portfolio system and established provincial Legislative Councils. The Indian Councils Act, 1892 laid the foundation of a limited and indirect electoral system in India. The Morley-Minto Reforms of 1909 introduced separate electorates for Muslims, which sowed the seeds of Partition in India. Therefore, option (a) is correct.
95. **Explanation:** The 'Purusha Sukta', contained in the Tenth Mandala of the Rigveda, describes the origin of the four Varnas—Brahmana, Kshatriya, Vaishya and Shudra—from the Cosmic

Being (statement 1 is correct). The 'Nasadiya Sukta' of the Tenth Mandala raises subtle philosophical questions regarding the creation of the universe and the existence of God (statement 2 is correct). Mandalas 2 to 7 of the Rigveda are regarded as ancient and are known as the 'Gotra Mandalas' or 'Family Books' (statement 3 is correct).

96. Explanation: After the Revolt of 1857, the British Government constituted the 'Peel Commission' under the chairmanship of Jonathan Peel to reorganise the Indian Army. On the basis of the Commission's recommendations, the proportion of European soldiers in the army was increased, the artillery was kept mainly under British control, and regiments were organised on the basis of caste, religion and region, such as Gurkhas, Sikhs and Pathans, under the policy of 'Divide and Rule'.

97. Explanation: The Mathura School of Art is known for its religious tolerance and plurality. In addition to Buddhist figures, including the Buddha and Bodhisattvas, sculptures of Jain Tirthankaras, such as Parshvanatha and Mahavira, and Hindu deities, such as Shiva, Vishnu, Surya and Durga, were also carved on a large scale; therefore, statement (d) is false. In the Mathura School, the Buddha was depicted with a muscular body, a serene smile, a raised right palm in the Abhaya Mudra and an ornamented halo behind his head.

98. Explanation: The Brahmana texts were written mainly in prose and explain the sacrificial mantras (statement 1 is correct). They have two principal components: 'Vidhi', which explains how a sacrifice should be performed, and 'Arthavada', which describes or praises the benefits of the sacrifice (statement 2 is correct). Statement 3 is false because the 'Shatapatha Brahmana' is not a Brahmana text of the Rigveda but of the 'Shukla Yajurveda', and its composition is associated with Maharshi Yajnavalkya. (The principal Brahmanas of the Rigveda are the 'Aitareya' and 'Kaushitaki'.)

99. Explanation: Several interconnected factors were responsible for the Industrial Revolution beginning first in Britain: a continuous supply of raw materials, such as cotton, from its vast imperial colonies and markets for the consumption of manufactured goods (statement (a)); abundant reserves of coal and iron for constructing factories and steam engines (statement (b)); cheap labour displaced from villages and driven into cities as a result of the Agricultural Revolution and the Enclosure Acts (statement (c)); and Britain's naval supremacy and political stability. Therefore, all of the above are correct.

100. Explanation: On 26 August 1789, the French National Assembly adopted the 'Declaration of the Rights of Man and of the Citizen'. This document was inspired by thinkers such as Rousseau and Locke. It declared that all men are born free and possess equal rights. It recognised freedom of expression, religious freedom, equality before the law and the right to property as the 'inalienable natural rights' of man. Therefore, option (a) is correct.

101. Explanation: The first session of the Congress was held in Bombay on 28 December 1885. It was originally scheduled to be held in Poona but was shifted because of an outbreak of cholera (statement 1 is correct). It was attended by 72 delegates from across the country, and Womesh Chandra Bonnerjee, a barrister from Calcutta, became its first President (statement 2 is correct). Statement 3 is false because Lord Dufferin, not Lord Curzon, was the Viceroy of India when the Congress was founded in 1885. Curzon served as Viceroy from 1899 to 1905.

102. Explanation: Among the four principal levels of disease prevention, 'primordial prevention' is the earliest stage of health education. Its principal objective is to prevent risk factors associated with lifestyle diseases, such as tobacco consumption, a high-fat diet and physical inactivity, from developing in society or among children. Therefore, educating children from an early age to refrain

from smoking is an example of this level (Assertion (A) is true). Since it targets the very origin of risk factors, Reason (R) is also true and provides the correct and logical explanation of Assertion (A).

103. Explanation: According to Katz, attitudes perform four functional roles: the adaptive function develops a favourable attitude towards stimuli that provide rewards. The knowledge function helps in understanding the environment by classifying disorganised information from the environment. The value-expressive function expresses an individual's ideology and life values. The ego-defensive function protects self-esteem by shielding the individual from feelings of inferiority—for example, when a player blames the referee after losing. Therefore, code (a) is correct.

104. Explanation: In the history of health, the supernatural theory regarded illness as a punishment for sin. The germ theory identified microorganisms, such as bacteria and viruses, as the sole cause of disease. The epidemiological triad clarified that disease is caused not merely by a pathogen but by an imbalance among the agent, host and environment. In modern times, chronic diseases, such as diabetes or cancer, are explained through the 'web of causation' theory, in which numerous social and biological factors are interconnected. Therefore, option (a) is correct.

105. Explanation: According to McGuire, persuasion depends on two factors: understanding the message and accepting it. Individuals with low self-esteem are unable to understand the message properly. Individuals with high self-esteem understand the message but challenge it because of their intelligence and do not accept it. In contrast, individuals with 'moderate self-esteem' understand the message correctly and do not resist it with excessive rigidity; therefore, they are considered the most receptive to persuasion.

106. Explanation: While defining social control in sociology, Ogburn and Nimkoff wrote, "Social control is the

pattern of pressure applied by society to maintain its established order and rules.” This pressure is not confined to the police or prisons; it also includes informal forces such as family, public opinion, customs, religion and morality, which keep an individual’s conduct in conformity with social norms.

107. Explanation: Fuster’s counselling model operates through five sequential stages: (1) Attending—establishing rapport with the client and exploring the problem; (2) Responding—responding empathetically to the client’s feelings; (3) Personalising—helping the client recognise his or her own role in the problem; (4) Initiating—setting goals and preparing an action plan; and (5) Evaluating—assessing progress and providing reinforcement. Therefore, option (b) represents the correct sequence.

108. Explanation: ‘Internal communication’ takes place among officers, employees and departments within the boundaries of an organisation (such as through notices, e-mails and meetings), with the objective of ensuring internal coordination, fostering team spirit and determining the direction of work. In contrast, ‘external communication’ refers to an organisation’s correspondence or advertising directed towards external entities—such as customers, shareholders, suppliers, the media and government departments—with the objective of public relations and business expansion. Therefore, option (b) presents the correct distinction.

109. Explanation: Kimball Young divided social control into two categories: positive and negative. In ‘positive social control’, society provides an individual with rewards, praise, honour, medals, promotion or affection for displaying correct and accepted behaviour so that such conduct may be reinforced. In contrast, ‘negative social control’ uses punitive methods such as condemnation, ridicule, social ostracism, fines or imprisonment to create fear when rules are violated. Therefore, awarding a medal is a form of ‘positive control’.

110. Explanation: Counselling is not merely the giving of personal advice; it is a scientific process. Counselling theories (such as Cognitive Behavioural Therapy or Person-Centred Therapy) help the counsellor organise the scattered information received from the client, understand the underlying psychological causes of the client’s problem and prepare a clear roadmap for its resolution. This also instils confidence in the client that the problem is being diagnosed using a credible method.

111. Explanation: Psychological studies have established that when an individual directly experiences an event or situation, the attitude formed from that experience is extremely clear, definite and strong. For example, the direct trauma inflicted by the atomic bombings of Hiroshima and Nagasaki created a lasting and strong negative attitude towards nuclear weapons throughout the world. Since an attitude formed through direct experience is held with greater certainty, it also exerts a stronger influence on behaviour.

112. Explanation: In the communication cycle, the ‘sender’ is the source in whose mind an idea or information originates and who determines the objective of the communication. This is followed by the process of ‘encoding’, in which the sender converts abstract ideas into symbols (words, pictures, digital codes or gestures) that can be transmitted through a medium. The interpretation of these symbols by the receiver is called ‘decoding’, not encoding. Therefore, option (b) is correct.

113. Explanation: In the formation of human values, while the family, as the primary institution, lays the foundation of morality and character in the child, schools and colleges (secondary institutions) are not confined merely to textbook knowledge. Through sports, group activities and discipline, they develop higher social values such as cooperation, equality, adherence to rules, secularism and civic sense. Therefore, the statement given in option (c), that they do not teach values, is false.

114. Explanation: In a historic expansion of the Ayushman Bharat Scheme in 2024, all senior citizens aged 70 years and above were provided with annual coverage of ₹5 lakh per family, irrespective of income. Therefore, statements 1 and 2 are correct. If the family is already covered under the Scheme, this top-up coverage of ₹5 lakh for senior citizens aged 70 years and above is separate from the family’s regular coverage of ₹5 lakh and is specifically available only to them. Therefore, statement 3 is also correct. Hence, all the statements are correct.

115. Explanation: A high concentration of fluoride in drinking water causes dental and skeletal fluorosis. Prolonged consumption of arsenic-contaminated groundwater causes skin diseases, ‘blackfoot disease’ and cancers of internal organs. Excess nitrate in drinking water impairs oxygen transport in infants and causes ‘blue baby syndrome’ (methaemoglobinaemia). Cadmium toxicity causes ‘itai-itai disease’, which is characterised by severe bone pain. Therefore, (a) is the correct match.

116. Explanation: In patients with haemophilia, the natural ability of the blood to clot becomes impaired; therefore, Assertion (A) is correct. Haemophilia is caused by a mutation in a gene located on the X chromosome, as a result of which clotting factor VIII (Haemophilia A) or factor IX (Haemophilia B) cannot be synthesised; therefore, Reason (R) is also correct. Since males have only one X chromosome, they are most commonly affected by this disease, whereas females are generally its carriers. Therefore, (R) correctly explains (A).

117. Explanation: The principle of ‘Build Back Better’ is related to the reconstruction and recovery phase following a disaster; therefore, statement (c) is false. Its objective is to make structures destroyed in a disaster safer, more disaster-resistant and more sustainable than before while rebuilding them, so that future risks can be reduced. The correct sequence

of the disaster cycle is: risk mitigation and preparedness → disaster event → immediate response → rehabilitation and 'Build Back Better' reconstruction.

- 118. Explanation:** Food 'availability' includes not only domestic production but also commercial imports and food aid; therefore, statement 1 is incorrect. Food 'access' is directly related to purchasing power, income and targeted distribution; therefore, statement 2 is correct. Food 'utilisation' or biological utilisation is related to safe drinking water, sanitation, health services and the efficient digestion and absorption of food by the body; therefore, statement 3 is also correct.
- 119. Explanation:** Down syndrome is caused by the presence of three copies of chromosome 21 (Trisomy 21). Turner syndrome occurs in females due to the absence of one X chromosome (45, XO), which affects physical growth. Klinefelter syndrome occurs in males due to the presence of an additional X chromosome (47, XXY). Cri-du-chat syndrome is caused by the deletion of one arm of chromosome 5, as a result of which the cry of an infant resembles that of a cat. Therefore, (a) is the correct match.
- 120. Explanation:** The Integrated Disease Surveillance Programme (IDSP) is implemented in India to detect outbreaks of epidemic-prone diseases (such as cholera, dengue and Japanese encephalitis) at an early stage. Using information technology, it collects data from the district level, undertakes laboratory-based confirmation and ensures that Rapid Response Teams take immediate containment measures when rising disease trends or warning signals are detected. Therefore, all the statements given above are correct.
- 121. Explanation:** Latin American countries face a double burden of communicable and non-communicable diseases. Owing to uncontrolled urbanisation and a humid tropical climate, mosquito-borne dengue and Zika, as well as Chagas disease caused by the protozoan *Trypanosoma cruzi*, are widespread; therefore, statements 1 and 2 are correct. In addition, the prevalence of

obesity, diabetes and hypertension has also increased rapidly because of processed foods and a sedentary lifestyle; therefore, statement 3 is also correct. Hence, all the statements are correct.

- 122. Explanation:** In autosomal recessive genetic disorders (such as sickle cell anaemia and thalassaemia), two copies of the mutated gene are required for an individual to develop the disease. If both the mother and the father are merely 'carriers', they will not themselves have the disease, but there is a 25% probability that the disease will manifest in their offspring. This genetic concept is extremely important in premarital counselling.
- 123. Explanation:** The National Population Policy, 2000 had set three explicit goals: the immediate goal—provision of health infrastructure, contraceptives and reproductive health services; the medium-term goal—bringing the TFR to the replacement level of 2.1; and the long-term goal—achieving a stable population by the year 2045 in accordance with the requirements of sustainable development. Therefore, all the options are correct.
- 124. Explanation:** The health system has a three-tier structure. Primary care is closest to the community, where prevention and treatment of common diseases take place. District hospitals fall under the secondary level. At the tertiary level (AIIMS and medical colleges), super-speciality technology, cancer therapy, neurosurgery and intensive care are available. A strong primary level prevents diseases from progressing to a severe stage, thereby reducing the burden on tertiary hospitals. Therefore, all the statements given in the question are true.
- 125. Explanation:** Multifactorial non-communicable diseases (NCDs) are not the result of a single gene; therefore, Statement 1 is incorrect. They are caused by the combined effects of several genes as well as environmental and behavioural factors, such as excessive intake of salt/sugar, physical inactivity, smoking and obesity; therefore, Statement 2 is correct. This

is why, despite the presence of genetic risk, the onset of these diseases can be prevented or delayed through a balanced diet, exercise and regular screening (Statement 3 is correct). Therefore, only Statements 2 and 3 are correct.

- 126. Explanation:** The main reason for the delayed utilisation of healthcare services among poor families is direct out-of-pocket expenditure. It includes not only the doctor's consultation fee but also the cost of expensive medicines, private diagnostic tests, transportation to distant hospitals and the loss of daily wages during treatment. This is why financial protection, such as Ayushman Bharat, is a central focus of health policy.
- 127. Explanation:** The occurrence of diseases is closely associated with biological factors, such as sex and age, and immunological factors. Cervical cancer occurs mainly among women and is caused by the Human Papillomavirus (HPV). Prostate cancer is specifically associated with the prostate gland in older men. Measles is an acute infectious viral disease that primarily affects unimmunised children. Therefore, all the above matches are correct.
- 128. Explanation:** Perception is the process of organising sensory information and determining its meaning. An individual's mood, previous experiences, expectations, motivations and cultural background may influence their perception. Therefore, the same health message or medical procedure may have different meanings for different individuals, and Assertion (A) is correct. However, perception is not entirely subjective. The characteristics of the external stimulus, information received through the sense organs, attention and the individual's previous experiences—all contribute to it. Therefore, Reason (R) is incorrect. Hence, the correct answer is (c).
- 129. Explanation:** Alfred Binet regarded intelligence as the capacity to understand, judge and reason. According to Terman, intelligence is the ability to think in terms of abstract

ideas. David Wechsler defined it as the aggregate/global capacity of an individual to act purposefully, think rationally and deal effectively with the environment. Thurstone, however, regarded intelligence as a group of seven primary mental abilities rather than a general factor. Therefore, the correct code is (a).

- 130. Explanation:** Gestalt theorists proposed certain laws of perception. According to the Law of Similarity, objects of similar colour or shape appear to belong to one category, such as the use of different colours for maternal health and child health, etc. According to the Law of Closure, when the brain receives an incomplete image, it fills in the gaps and perceives it as a complete form (Statement 2 is true). However, the Law of Proximity states that objects located close together in space or time are perceived as a group, not objects located far apart. Therefore, Statement 3 is incorrect.
- 131. Explanation:** The Motivational Cycle operates through four main stages: (1) Need—a deficiency or imbalance of something in the body, such as a deficiency of water; (2) Drive or Tension—an internal urge arising from the need, such as thirst; (3) Goal-directed Behaviour—an action undertaken to reduce the tension, such as searching for water; and (4) Goal Attainment and Reduction of Drive—fulfilment of the need after the goal has been attained. Therefore, option (b) presents the correct sequence.
- 132. Explanation:** In Discrimination Learning, an individual learns to distinguish between two or more similar-looking stimuli and respond differently to them—for example, distinguishing between an ordinary seasonal cold and cough and the serious symptoms of tuberculosis. Failure to distinguish between symptoms is a failure of discrimination, not an example of it; therefore, option (c) is incorrect. Motor learning involves physical skills, verbal learning involves linguistic symbols, and concept learning involves learning the abstract meaning and rules of a subject.

- 133. Explanation:** Developmental psychology is the scientific study of the physical, cognitive, emotional and social changes that occur at all stages of the human life cycle, from conception to old age. It is highly relevant to public health and health education because the health needs of different age groups vary—for example, immunisation among infants, de-addiction and mental health among adolescents, lifestyle diseases among adults, and chronic disease management among older persons. Therefore, option (b) is true.
- 134. Explanation:** The Maintenance and Welfare of Parents and Senior Citizens Act, 2007 provides a legal basis for the maintenance of older persons and the protection of their lives. Health education for older persons is not limited to medicines; it also includes a balanced diet, light exercise, a safe home to prevent falls, and measures to address loneliness and mental health. In addition, training the family members or assistants who care for older persons (Caregivers) is essential for long-term health management. Therefore, Statements 1 and 3 are true.
- 135. Explanation:** The main goals of psychology are the description and explanation of behaviour, unbiased prediction, and bringing about desirable change in or control of behaviour. If the intellectual level, interests or stress level of a student or an individual is measured accurately, their future performance can be predicted. On the basis of this prediction, appropriate guidance can be provided to control and modify their behaviour for the welfare of society and the individual.
- 136. Explanation:** On the basis of his 'Trial and Error' experiments on cats, Thorndike proposed three main laws of learning: (1) Law of Readiness—mental preparedness for performing a task; (2) Law of Exercise—the connection becomes stronger through repeated practice; and (3) Law of Effect—learning becomes permanent when the outcome of an action is satisfying. The other options contain laws of perception, memory processes and psychoanalytic defence mechanisms.

- 137. Explanation:** Information in Short-Term Memory is generally acquired through one or two brief learning attempts, without having undergone deep rehearsal or encoding. Therefore, its Memory Trace is very weak, and if it is not mentally rehearsed within 20–30 seconds, it is quickly forgotten. Only through proper rehearsal and meaningful association can this information be stored permanently in Long-Term Memory (LTM).
- 138. Explanation:** A Health Education Officer is not a psychiatrist or Clinical Psychologist and, therefore, cannot provide definitive clinical treatment for disorders. Their actual and important role is to identify, in a timely manner, the initial 'Warning Signs' of mental ill-health, excessive anxiety, depression, substance dependence or suicide in the community. The officer provides initial emotional counselling to the affected person and the family and refers them to an appropriate tertiary hospital or specialist.
- 139. Explanation:** In Classical Conditioning, the 'Conditioned Stimulus' (CS) is a neutral stimulus that initially produces no natural response. However, after being repeatedly associated with an unconditioned stimulus, such as a painful injection, it begins to produce the Conditioned Response of fear. Here, the white coat was initially neutral, but because it became associated with the pain of the injection, it became a 'Conditioned Stimulus', the sight of which produces fear in the child.
- 140. Explanation:** The Human Development Index is the geometric mean of the three-dimensional indices of health, education and standard of living. The use of the geometric mean ensures that an extremely high achievement in one dimension cannot fully compensate for a very low achievement in another dimension. Human development is based on balanced progress; if achievement in health is good but achievement in education is very high, the overall index will be affected. The value of the Human Development Index ranges from zero to one. Zero represents the minimum and one represents the highest level of human development.

- 141. Explanation:** Real Gross Domestic Product is measured at the constant prices of the base year. Therefore, the nominal expansion caused by an increase in prices during the current year can be separated from the actual growth in production. If the quantity of production remains the same and only prices increase, monetary/nominal Gross Domestic Product will increase, but the increase caused by rising prices will not be reflected in Real Gross Domestic Product. For this reason, Real Gross Domestic Product provides a more reliable indication of the actual growth in production in the economy. Therefore, both the Assertion and the Reason are true, and the Reason explains the Assertion.
- 142. Explanation:** According to NITI Aayog's National Multidimensional Poverty Index: A Progress Review 2023, the proportion of India's multidimensionally poor population was 24.85 percent in 2015–16, which declined to 14.96 percent in 2019–21. Thus, it decreased by 9.89 percent. During the same period, approximately 13.5 crore people moved out of multidimensional poverty. This measurement is based on combined deprivations in health, education and standard of living.
- 143. Explanation:** Under the Usual Principal and Subsidiary Status, the subsidiary economic activity performed by an individual during the preceding 365 days is also included in addition to the individual's Usual Principal Status. The subsidiary economic activity must have been performed for 30 days or more. This also enables the work contribution of those individuals to be recorded who remained in some other status for most of the year but were engaged in economic activity for a certain period. It is particularly useful in an economy characterised by agriculture and irregular employment.
- 144. Explanation:** Under the Usual Principal Status, an individual's status is determined on the basis of their principal activity during the 365 days preceding the date of the survey. If the individual was principally not working but was seeking work or was available for work, the individual is regarded as unemployed. Because of its long reference period, this measurement indicates the individual's usual economic activity status. The Current Weekly Status considers only the preceding seven days, whereas the Usual Principal and Subsidiary Status also takes into account subsidiary economic activity performed for at least 30 days within the 365-day period.
- 145. Explanation:** Dadabhai Naoroji presented an early economic assessment of poverty in India during the colonial period. Subsequently, the Y. K. Alagh Committee (1979), Lakdawala Committee (1993), Tendulkar Committee (2009) and Rangarajan Committee (2014) proposed different methodologies for measuring poverty.
- 146. Explanation:** The Gender Development Index compares the achievements of women and men in all three human development dimensions of health, education and standard of living. It is the ratio obtained by dividing the Human Development Index of women by the Human Development Index of men. The closer its value is to one, the smaller the difference between the human development levels of women and men is considered to be.
- 147. Explanation:** The base year is the year whose prices are treated as constant for valuing production in different years. This makes it possible to compare Real Gross Domestic Product, Gross Value Added and national income. If the current prices of each year are used, the effects of production growth and price increases will be combined. By using the constant prices of the base year, the effect of changes in prices/inflation is separated, and actual economic growth can be assessed more accurately. The base year is not a means of determining tax rates, exchange rates or the population count.
- 148. Explanation:** The Head-Count Ratio indicates the percentage or proportion of the population living below the poverty line. It is a simple and widely used method of measuring absolute poverty. It is calculated by dividing the number of poor persons by the total population and multiplying the result by 100 to express it as a percentage. Although it indicates how many people are poor, it does not indicate their distance from the poverty line or the intensity of deprivation. The Gini Coefficient measures income inequality, the Dependency Ratio indicates the burden of dependants on the working-age population, and the Labour Force Participation Rate is an employment-related indicator.
- 149. Explanation:** In India, the major indicators relating to employment, unemployment, the labour force and the workforce are obtained from the Periodic Labour Force Survey. This survey measures employment and unemployment using different reference-period concepts, such as Usual Status and Current Weekly Status. The Household Consumption Expenditure Survey is more suitable for consumption and poverty analysis, whereas the National Family Health Survey relates to health and demographic indicators. The Periodic Labour Force Survey is a major source for analysing the structure of the labour market, the nature of employment and the unemployment rate.
- 150. Explanation:** In the Human Development Index, the standard of living is measured through Gross National Income per capita. In the present context, it is expressed in 2021 purchasing power parity (PPP) dollars. Purchasing Power Parity helps compare the real purchasing power of income by adjusting for differences in prices among different countries. The size of total national income alone is not sufficient because the resources available per person may differ in a country with a large population. Therefore, Gross National Income per capita is a more appropriate comparative indicator of the standard of living.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-8

Answer key

1. (b)	2. (c)	3. (c)	4. (c)	5. (b)	6. (b)	7. (b)	8. (b)	9. (d)	10. (c)
11. (b)	12. (c)	13. (c)	14. (d)	15. (b)	16. (b)	17. (b)	18. (b)	19. (d)	20. (a)
21. (a)	22. (b)	23. (a)	24. (d)	25. (d)	26. (b)	27. (c)	28. (a)	29. (a)	30. (d)
31. (a)	32. (b)	33. (b)	34. (b)	35. (c)	36. (a)	37. (c)	38. (c)	39. (c)	40. (c)
41. (b)	42. (d)	43. (b)	44. (c)	45. (a)	46. (c)	47. (b)	48. (b)	49. (b)	50. (a)
51. (a)	52. (c)	53. (b)	54. (a)	55. (b)	56. (a)	57. (a)	58. (d)	59. (d)	60. (b)
61. (d)	62. (d)	63. (a)	64. (a)	65. (a)	66. (a)	67. (b)	68. (c)	69. (c)	70. (b)
71. (a)	72. (a)	73. (b)	74. (c)	75. (d)	76. (a)	77. (a)	78. (a)	79. (a)	80. (a)
81. (b)	82. (b)	83. (b)	84. (a)	85. (d)	86. (b)	87. (a)	88. (b)	89. (a)	90. (a)
91. (d)	92. (c)	93. (b)	94. (b)	95. (b)	96. (b)	97. (b)	98. (a)	99. (b)	100. (b)
101. (a)	102. (b)	103. (d)	104. (a)	105. (b)	106. (b)	107. (d)	108. (a)	109. (a)	110. (b)
111. (b)	112. (c)	113. (a)	114. (a)	115. (a)	116. (d)	117. (a)	118. (b)	119. (a)	120. (a)
121. (b)	122. (a)	123. (c)	124. (b)	125. (d)	126. (a)	127. (a)	128. (d)	129. (a)	130. (d)
131. (a)	132. (a)	133. (b)	134. (c)	135. (d)	136. (b)	137. (b)	138. (a)	139. (b)	140. (b)
141. (d)	142. (a)	143. (c)	144. (a)	145. (c)	146. (a)	147. (b)	148. (b)	149. (c)	150. (d)

Explanation

1. **Explanation:** The dual system of government refers to the dual governmental structure of a federal system, in which the Union and the States—two constitutional levels—function. The powers and jurisdictions of both levels are determined by the Constitution. The Seventh Schedule, read with Article 246, distributes legislative subjects through the Union List, State List and Concurrent List. India's original federal structure was based on the two levels of the Union and the States. Subsequently, Panchayats and Municipalities were accorded constitutional recognition as the third tier of government at the local level. Therefore, option (b) is correct.
2. **Explanation:** The Finance Commission is a constitutional body constituted under Article 280 of the Constitution. The President constitutes it by order at the expiration of every fifth year or at such earlier time as the President considers necessary. It consists of a Chairman and four other members. Parliament may, by law, determine the qualifications of the members and the manner in which they are to be selected. The Finance Commission makes recommendations regarding the distribution of the net proceeds of taxes between the Union and the States, the allocation of the respective shares among the States, the principles governing grants-in-aid to the States, and the augmentation of the resources of Panchayats and Municipalities. Its recommendations are not automatically legally binding. Under Article 281, they are laid before both Houses of Parliament along with an explanatory memorandum regarding the action taken thereon.
3. **Explanation:** Provisions relating to the Public Service Commissions are contained in Part XIV of the Constitution under Articles 315 to 323. Article 315 provides for Public Service Commissions for the Union and the States. The members of the Union Public Service Commission are appointed by the President, whereas the members of a State Public Service Commission are appointed by the Governor. The annual report of the Union Public Service Commission is submitted to the President, while that of a State Public Service Commission is submitted to the Governor. The expenditure of the Union Commission is charged on the Consolidated Fund of India.
4. **Explanation:** The 73rd Constitution Amendment Act, 1992 relates to rural local self-government, that is, Panchayati Raj. It came into force on 24 April 1993. It inserted Part IX into the Constitution, containing provisions relating to Panchayats under Articles 243 to 243-O. It also added the Eleventh Schedule, which lists 29 subjects. Under Article 243G, the State Legislature may, by law, devolve powers and responsibilities relating to these subjects upon the Panchayats. National Panchayati Raj Day is observed every year on 24 April. After the Seventy-third Amendment, Madhya Pradesh was the first State to conduct Panchayat elections, which were held there in 1994.
5. **Explanation:** Article 32 guarantees the right to approach the Supreme Court for the enforcement of Fundamental Rights. This right is itself a Fundamental Right. Under Article 32(2), the Supreme Court may issue appropriate directions, orders and writs in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari. In the Constituent Assembly, Dr B. R. Ambedkar described the then Draft Article 25, which is the present Article 32, as the very soul of the Constitution and its very heart. Under Article 226, the High Courts may issue writs for the enforcement of Fundamental Rights as well as other legal rights. Therefore, their writ jurisdiction is wider than that under Article 32 in terms of purpose or subject matter.
6. **Explanation:** The Main Central Thrust (MCT) separates the Greater Himalaya from the Lesser Himalaya. Similarly, the Main Boundary Thrust separates the Lesser Himalaya from the Shiwaliks. The Indus–Tsangpo Suture Zone is situated between the Trans-Himalaya and the Greater Himalaya. Therefore, the correct answer for the Main Central Thrust is option (b).
7. **Explanation:** Chilika Lake, located in Odisha, is India's largest brackish-water coastal lake or lagoon. Wular Lake, located in Jammu and Kashmir, is India's largest freshwater lake. Loktak Lake in Manipur is the largest freshwater lake in north-eastern India and contains the Keibul Lamjao floating National Park. Sambhar Lake is India's largest inland saltwater lake. Therefore, option (b) is correct.
8. **Explanation:** The Big Bang Theory is the most widely accepted theory regarding the origin of the universe. Georges Lemaître presented a model of the expanding universe and proposed the primeval atom hypothesis in 1931, which is regarded as an early form of the modern Big Bang Theory. In 1929, Edwin Hubble provided empirical evidence for the expansion of the universe. According to this theory, the universe originated through the Big Bang approximately 13.8 billion years ago from an extremely dense and hot state, and its expansion continues even today. Therefore, option (b) is correct.
9. **Explanation:** - Laterite soil develops in regions with high rainfall and temperature, mainly under tropical climatic conditions. Due to heavy rainfall, this soil is affected by the process of leaching. The upper part of this soil is rich in iron and aluminium, whereas it lacks nutrients/substances such as nitrogen, lime, phosphorus, potash, and organic matter. A major characteristic of this soil is that it becomes hard like a brick when dry and soft and slippery when wet. This soil is neither moisture-retentive nor does it have a high Clay factor.
10. **Explanation:** The Yellow Revolution is directly related to oilseed production. The White Revolution is associated with milk production, the Blue Revolution with fish production,

the Round Revolution with potato production, and the Green Revolution with foodgrain production, particularly wheat and rice. Oil and oilcake are obtained from oilseeds and are used for food, soap, animal feed and other purposes. Therefore, option (c) is correct.

11. **Explanation:** Sedimentary rocks are formed when sediments obtained through the weathering, erosion and transportation of older rocks by wind, water or ice are deposited in layers. The process through which these sediments become compacted and transformed into solid rock is called lithification. Metamorphism is the process by which pre-existing rocks are transformed under heat and pressure. Weathering relates to the breakdown of rocks, while folding is associated with the bending of rocks due to compression. Therefore, option (b) is correct.
12. **Explanation:** The River Ganga originates from the Gangotri Glacier near Gaumukh in Uttarkashi, Uttarakhand, where it is known as the Bhagirathi. At Devprayag, the Bhagirathi and Alaknanda rivers meet, and only after this confluence is the river called the 'Ganga'. At Rudraprayag, the Mandakini and Alaknanda meet, whereas at Karnaprayag, the Alaknanda and Pindar meet. Therefore, the correct answer is Devprayag, that is, option (c).
13. **Explanation:** Black soil has a high water-retention capacity. It becomes soft and sticky when wet and hard and cracked when dry. Therefore, it is called 'self-ploughing' soil. This soil is most suitable for cotton cultivation. Its colour ranges from deep black to light black and chestnut-like shades. Generally, it is rich in iron, lime, calcium, potash, aluminium, and magnesium carbonate, but it lacks nitrogen, phosphorus, and organic matter (humus).
14. **Explanation:** According to the given options—
Bhil – Gujarat, Karnataka, Madhya Pradesh, Rajasthan, Andhra Pradesh, Telangana, Chhattisgarh, Maharashtra, Tripura

Gaddi – Himachal Pradesh, Jammu and Kashmir, and Ladakh

Kota – Tamil Nadu, Karnataka

Toda – Tamil Nadu, Karnataka

Therefore, Toda is a tribe of Tamil Nadu, not Kerala.

15. **Explanation:** The larger the size of an ocean, the smaller its annual temperature range. Therefore, the Atlantic Ocean has a greater annual temperature range than the Pacific Ocean. The Northern Hemisphere has a greater proportion of land than the Southern Hemisphere, whereas the Southern Hemisphere has a greater proportion of water than the Northern Hemisphere. Therefore, the annual range of temperature is greater in the Northern Hemisphere than in the Southern Hemisphere.
16. **Explanation:** Rhizobium, Azotobacter, Azospirillum, and blue-green algae have long been used as biofertilizers. Blue-green algae are associated with cyanobacteria genera such as Nostoc, Anabaena, Tolypothrix, or Aulosira. These biofertilizers help in the fixation of atmospheric nitrogen.
17. **Explanation:** A life-cycle-based approach means ensuring continuity of essential health services throughout pregnancy, the neonatal stage, childhood, adolescence, adulthood and old age. It includes disease prevention, health promotion, treatment, rehabilitation and financial protection, and is not confined solely to the treatment of disease. Health assurance for poor and disadvantaged families and digital health systems strengthen the accessibility and continuity of services. Poor families and digital health are not themselves stages of the life cycle but are beneficiaries and supporting mechanisms of comprehensive health protection. Therefore, option (b) is correct.
18. **Explanation:** Resource mobilisation is a management process. It involves identifying the financial, human, physical and technological resources required to achieve the objectives of an institution or organisation, mobilising them from various sources, and managing and utilising them

effectively. It also includes developing long-term relationships with resource partners whose values and objectives are aligned with the organisation's mission. Therefore, option (b) is correct.

19. **Explanation:** Six major services are provided under the Anganwadi Services of the Integrated Child Development Services Scheme—supplementary nutrition, non-formal pre-school education, nutrition and health education, immunisation, health check-ups and referral services. Immunisation, health check-ups and referral services are provided in collaboration with the National Health Mission and the public health system. International defence training is not a service related to child nutrition, health or early education. Therefore, option (d) is correct.
20. **Explanation:** Here, collective mobilisation refers to organising people, communities and civil society organisations for a common social objective. It increases awareness and public support regarding issues such as caste discrimination, gender inequality and the rights of persons with disabilities. It strengthens the voice of affected groups and generates democratic public pressure to ensure the accountability of policymakers and institutions. Thus, it assists in advancing equal rights, opportunities and social inclusion. Therefore, option (a) is correct.
21. **Explanation:** In 1829 AD, the practice of Sati was prohibited during the tenure of Lord William Bentinck. Slavery was prohibited in 1843 AD during the tenure of Lord Ellenborough. The Hindu Widows' Remarriage Act was passed in 1856 AD during the tenure of Lord Canning. The Sarda Act was passed in 1929 AD during the tenure of Lord Irwin. Therefore, only option (a) is correct.
22. **Explanation:** The Indus River is mentioned most frequently in the Rigveda, whereas the Saraswati was the most sacred river of the Rigvedic Aryans. The Saraswati has been described as Ambitame, Devitame and Naitame. The Ganga is mentioned once and the Yamuna three times.

- 23. Explanation:** On 12 March 1930, Gandhiji began the journey from Sabarmati Ashram to Dandi with his 80 supporters. After a 24-day-long journey, he symbolically violated the Salt Law at Dandi on 6 April 1930, and thus formally launched the Civil Disobedience Movement by breaking the Salt Law. The Gandhi–Irwin Pact was concluded on 5 March 1931, after which Gandhiji suspended the movement. The Dandi March began from Sabarmati, not from Lahore. Therefore, option (a) is correct.
- 24. Explanation:** Aurangzeb was a staunch Sunni Muslim and was known as Zinda Pir. He reimposed the jizya tax in April 1679. He annexed Bijapur to the Mughal Empire in 1686 AD and Golconda in 1687 AD. Although he banned music in the imperial court, he was himself proficient in playing the veena. Therefore, all four statements are correct.
- 25. Explanation:** British Prime Minister Ramsay MacDonald announced the Communal Award on 16 August 1932, under which separate representation was granted to the Depressed Classes. Opposing it, Gandhiji began a fast unto death in Yerawada Jail, Poona, on 20 September 1932. The Poona Pact was concluded between Gandhiji and Dr Ambedkar on 24 September 1932. Under it, separate electorates were abolished and the number of reserved seats was increased from 71 to 148. Therefore, all the statements are correct.
- 26. Explanation:** Sri Gupta was the founder of the Gupta dynasty. He was succeeded by Ghatotkacha as the ruler of the Gupta dynasty. The first great ruler of this dynasty was Chandragupta I, who assumed the title of Maharajadhiraja and established the Gupta Era in 319 AD. He was succeeded by Samudragupta, who was called the Napoleon of India. Therefore, the correct chronological order is option (b).
- 27. Explanation:** Various historians have expressed different views regarding the nature of the Revolt of 1857–V. D. Savarkar described it as India's First War of Independence. Benjamin Disraeli regarded it as a national revolt. James Outram and W. Taylor described it as a conspiracy of Hindus and Muslims against the British. T. R. Holmes described it as a war between barbarism and civilisation. Therefore, option (c) is correct.
- 28. Explanation:** Fumigants constitute an important category of chemical control agents. In gaseous or vapour form, they kill pests through their respiratory systems. Aluminium phosphide is used to kill rodents and stored-grain pests. In contrast, systemic insecticides spread through the vascular system of plants and control sap-sucking pests. Thus, fumigants are associated with pest control in the gaseous or vapour state.
- 29. Explanation:** There are two important species of jute. *Corchorus capsularis* is known as white jute, and its major variety is J.R.C.-212, whereas *Corchorus olitorius* is known as tossa jute, and its major variety is J.R.O.-524. Suvin and Sujata are cotton varieties, whereas Shakti and Protina are high-lysine varieties of maize. Therefore, option (a) presents the correct matching.
- 30. Explanation:** In a monopsony, there is only one buyer, as in the case of sugarcane farmers in a region selling sugarcane to a single sugar factory. In a duopoly or duopsony market, there are two sellers or two buyers, respectively. In an oligopoly or oligopsony market, there are a limited number of sellers or buyers. Therefore, all four pairs are correct.
- 31. Explanation:** Insecticides have been classified on the basis of generations. The first generation includes inorganic and botanical insecticides. The second generation comprises synthetic organic insecticides. The third generation comprises insect growth regulators, which affect the growth and metamorphosis of insects. The fourth generation includes synthetic pyrethroids. This sequence represents the development of insecticides from traditional control towards more modern and targeted control.
- 32. Explanation:** Iodine is essential for the formation of the thyroid hormones—thyroxine and triiodothyronine. Its deficiency may cause enlargement of the thyroid gland, which is known as goitre. Severe iodine deficiency in a mother during pregnancy may cause congenital iodine deficiency syndrome, formerly called 'cretinism'. Its symptoms may include intellectual disability, severe hearing loss and impaired speech development. Therefore, option (b) is correct.
- 33. Explanation:** In a galvanic or voltaic electrochemical cell, the energy of a spontaneous chemical reaction is converted into electrical energy. A cell supplying electrical energy has two external terminals—one positive and the other negative. In the external circuit, conventional electric current is considered to flow from the positive terminal of the cell to the negative terminal. Primary cells are generally not recharged after discharge, whereas secondary cells can be recharged and used several times. Therefore, option (b) is correct.
- 34. Explanation:** Surface tension is the force per unit length acting in the plane of the interface between a liquid and another medium in contact with it, generally air, or the surface energy per unit area. Owing to surface tension, a free surface tends to assume the minimum possible surface area under the given external conditions. Its SI unit is newton per metre. Surface tension generally decreases with an increase in temperature and becomes zero at the critical point for a liquid–vapour interface. Adding detergent or soap to water reduces the surface tension of water. Therefore, option (b) is correct.
- 35. Explanation:** The islets of Langerhans constitute the endocrine part of the pancreas. Alpha cells secrete glucagon, beta cells secrete insulin, delta cells secrete somatostatin, epsilon cells secrete ghrelin, and PP/F/gamma cells secrete pancreatic polypeptide. Among these hormones, insulin and glucagon are the principal regulators of blood glucose homeostasis. Among

the given options, only the delta cell–somatostatin pair is correct. Therefore, option (c) is the correct answer.

36. **Explanation:** Foodborne botulism is a rare but serious foodborne intoxication caused mainly by the botulinum toxin produced by *Clostridium botulinum*. Some toxin-producing strains of *Clostridium butyricum* and *Clostridium baratii* may also produce this toxin. Salmonella infection, or salmonellosis, is a foodborne infection caused by *Salmonella* species, particularly non-typhoidal *Salmonella*, and is generally transmitted through contaminated food. Therefore, option (a) is correct.
37. **Explanation:** Electrolytic refining is a widely used method for refining many metals. In this process, the impure metal serves as the anode, a thin strip of pure metal serves as the cathode, and a solution of a salt of the corresponding metal is used as the electrolyte. When electric current is passed, pure metal is deposited on the cathode and soluble impurities pass into the solution, whereas insoluble impurities settle below the anode and form anode mud. Roasting is the process of heating sulphide ores at a high temperature in an excess supply of air, whereas calcination is the process of heating carbonate ores at a high temperature in a limited supply of air. Therefore, option (c) is correct.
38. **Explanation:** Opium is obtained from the dried latex extracted from the unripe seed pods or fruit capsules of the opium poppy, *Papaver somniferum*. It contains morphine, codeine and other alkaloids. Vinca alkaloids such as vincristine and vinblastine are obtained from *Sadabahar*, *Catharanthus roseus*, formerly known as *Vinca rosea*, and are useful in the treatment of certain cancers. *Bacopa monnieri* is described in Ayurveda as a *Medhya Rasayana*, or a traditional medicine that supports memory and intellect. Therefore, all three pairs are correct.
39. **Explanation:** The Trishakti Corps of the Indian Army launched 88.4 FM 'Radio Sikkim Sundari' in eastern Sikkim on 12 April 2026. It is

Sikkim's first community radio station in a border village. Its objective is to improve access to communication and information in remote, high-altitude border areas. It will broadcast local news, weather updates, information on government schemes, regional culture, and programmes relating to agriculture, education and community development. Therefore, both statements are correct.

40. **Explanation:** Indian Grandmaster R. Vaishali won the 'FIDE Women's Candidates Tournament 2026', held in Pegeia, Paphos, Cyprus. She became the first Indian woman to win this competition. Vaishali defeated Katerina Lagno in the 14th and final round and secured a total of 8.5 points in 14 rounds.
41. **Explanation:** The Jonnagiri Gold Project is located in Tuggali Mandal of Kurnool district, Andhra Pradesh. Spread over a mining lease area of approximately 597.8 hectares, it is India's first private-sector primary gold mine to operate on a commercial scale since Independence. Developed by Geomysore Services India Pvt. Ltd. with an investment of approximately ₹405 crore, the project commenced commercial operations on 24 June 2026. In July 2026, it was officially renamed the 'Swarnagiri Gold Mine'. This project is important for increasing India's domestic gold production.
42. **Explanation:** The grand finale of the 61st Femina Miss India competition was held at KIIT, Bhubaneswar, on 18 April 2026. Sadhvi Satish Sail of Goa won the title of Femina Miss India World 2026. Sadhvi Sail will represent India not at Miss Universe, but at the 74th Miss World Festival to be held in Tanzania in May 2027. Therefore, statement (D) is false. Rajnandini Pawar of Maharashtra was the first runner-up.
43. **Explanation:** Dubai has developed the world's first purpose-built commercial eVTOL air-taxi station near Dubai International Airport. Named 'VDX', this four-storey station covers an area of approximately 3,100 square metres and will be capable of serving up to

1,70,000 passengers annually once commercial operations commence. The proposed air-taxi journey from Dubai International Airport to Palm Jumeirah is estimated to take approximately 10 minutes, whereas the journey by road takes approximately 45 minutes.

44. **Explanation:** On the occasion of World Heritage Day on 18 April 2026, the Lieutenant Governor of Ladakh, Vinay Kumar Saxena, laid the foundation stone for India's first 'Petroglyph Conservation Park' at the Indus Ghat in Leh. Petroglyphs are ancient pictures, symbols or figures made by pecking, scratching or engraving rock surfaces. The petroglyphs of Ladakh extend from the Palaeolithic period to the later historical and Buddhist periods. The park will primarily be used for the scientific conservation of isolated petroglyph-bearing boulders that are at risk of damage. Therefore, both statements are correct.
45. **Explanation:** The number 193 is a prime number, whereas all the remaining numbers, 177, 161 and 171, are composite numbers because 177, 161 and 171 are divisible by 3, 23 and 19, respectively.
46. **Explanation:** $\because x + \frac{1}{x} = 2$
 $\therefore x = 1$
 $\therefore \left(x^2 + \frac{4}{x^4}\right)\left(x^3 - \frac{4}{x^3}\right)$
 $= \left((1)^2 + \frac{4}{(1)^4}\right)\left((1)^3 - \frac{4}{(1)^3}\right)$
 $= (1 + 4) [1 - 4]$
 $= 5 \times -3$
 $= -15$
47. **Explanation:** Length of each edge of the metal cube = 12 cm
 Let the edge length of the third smaller cube = a
 According to the question,
 $a^3 + 6^3 + 8^3 = (12)^3$
 $a^3 + 216 + 512 = 1728$
 $a^3 = 1000$
 $a = 10 \text{ cm}$
 Therefore, the length of each edge of the third cube will be 10 cm.
48. **Explanation:** Area of the new circle
 $= \pi (r_1^2 + r_2^2)$
 $= \pi (8^2 + 15^2)$
 $= \pi \times 289$
 $= 289\pi$

∴ Radius of the new circle

$$= \sqrt{289} = 17 \text{ cm}$$

∴ Circumference of the new circle

$$= 2 \times \pi \times r$$

$$= 2 \times 17 \times \pi = 34\pi$$

49. **Explanation:** The numbers between 10 and 65 that are divisible by 2, 3 and 4 are the numbers divisible by the L.C.M. of 2, 3 and 4, that is, 12. Numbers divisible by 12 = 12, 24, 36, 48, 60

Therefore, a total of 5 numbers between 10 and 65 are divisible by 2, 3 and 4.

50. **Explanation:**

$$\frac{\overbrace{179}^{+9} \times \overbrace{172}^{+2} \times \overbrace{173}^{+3}}{17} = \frac{9 \times 2 \times 3}{17}$$

$$= \frac{54}{17} = 3 \text{ Remainder}$$

51. **Explanation:** The noted socialist leader Yusuf Meherally coined both the slogans 'Quit India' and 'Simon Go Back' (1928); therefore, statement 1 is correct and statement 3 is incorrect. On 8 August 1942, at the meeting of the All India Congress Committee held at Gowalia Tank Maidan in Mumbai, Gandhiji gave the nation the historic call 'Do or Die'; therefore, statement 2 is correct. Subhas Chandra Bose is associated with the slogans 'Jai Hind' and 'Delhi Chalo'.
52. **Explanation:** Among the major committees constituted for framing the Constitution, the Drafting Committee, formed on 29 August 1947, was chaired by Dr B. R. Ambedkar. The Union Powers Committee and the Union Constitution Committee were headed by Jawaharlal Nehru. Sardar Vallabhbhai Patel was the Chairman of the Provincial Constitution Committee and the Advisory Committee on Fundamental Rights. The Steering Committee and the Rules of Procedure Committee of the Constituent Assembly were chaired by Dr Rajendra Prasad. Therefore, option (a) is correct.
53. **Explanation:** The Industrial Revolution began in England because of capital, technology, abundant reserves of

iron and coal, and colonial markets (Assertion (A) is correct). The Treaty of Versailles of 1919 imposed excessive reparations and territorial restrictions on Germany, which laid the foundation for the rise of Hitler and the Second World War (Reason (R) is correct). Although both historical statements are entirely correct independently, (R) has no direct explanatory relationship with the economic and technological causes stated in (A).

54. **Explanation:** During the period of violence in the Noakhali region of Bengal, the noted Bengali anthropologist and Gandhian leader Nirmal Kumar Bose served as Mahatma Gandhi's private secretary. He also worked as Gandhiji's interpreter in this region. He served as Mahatma Gandhi's private secretary from 1946 to 1947.

Note—Pyarelal was also Mahatma Gandhi's private secretary. However, because of the violence in Noakhali and Mahatma Gandhi's lack of knowledge of the Bengali language—neither Pyarelal nor Mahatma Gandhi knew Bengali—Nirmal Kumar Bose became Gandhiji's private secretary at Mahatma Gandhi's request.

55. **Explanation:** The Gadkaris were hereditary soldiers serving in the forts of the Marathas. In 1844 AD, they revolted in Kolhapur against the arbitrary collection of land revenue, their dismissal from service in the Maratha army and the placing of their lands under the supervision of Mamlatdars. The government had to make considerable efforts to suppress this revolt.

56. **Explanation:** The 'Bhumi Sukta', contained in the 12th Kanda of the Atharvaveda, is a historic Vedic hymn expressing profound devotion towards the environment, nature and the motherland (option (a) is correct). It proclaims, "Mata Bhumi Putro'ham Prithivyah", which underlines the sacred relationship between human beings and the environment. It contains prayers for the prosperity of rivers, mountains, agriculture and cultivable land.

57. **Explanation:** Following the sacrifice of Potti Sriramulu, Andhra State, the first linguistic state, was created on 1 October 1953. On 1 November 1956, the Telugu-speaking areas of Hyderabad were merged with Andhra State, and it was renamed Andhra Pradesh. On 1 May 1960, Bombay State was reorganised to form Maharashtra and Gujarat. On 1 November 1966, Punjab was reorganised and Haryana was formed as a separate state. On 2 June 2014, Telangana separated from Andhra Pradesh and became the 29th state of India. Therefore, the matching in option (a) is correct.

58. **Explanation:** The Kuka Movement began in Punjab with the objective of eradicating undesirable practices in Sikhism (Statement 1 is correct). Baba Ram Singh gave it a political character and directed it towards the restoration of Sikh sovereignty (Statement 2 is correct). Long before the Non-Cooperation Movement, he had adopted a complete boycott of the British Government's postal services, schools, courts and foreign cloth (Swadeshi campaign) (Statement 3 is correct). After the Malerkotla incident in 1872, the British ruthlessly suppressed this movement.

59. **Explanation:** In November 1945, INA officers were tried at the Red Fort. Owing to intense public outrage throughout India and the fear of revolts in the Army and Navy, Commander-in-Chief Field Marshal Sir Claude Auchinleck was compelled to remit the sentences of the accused officers of the Indian National Army. Therefore, Statement (d) is incorrect. The Indian National Army Defence Committee was constituted under the leadership of Bhulabhai Desai.

60. **Explanation:** The Dashavatara Temple at Deogarh, situated in Lalitpur district of Jhansi (U.P.), is an outstanding example of classical Gupta-period temple architecture. It is based on the 'Panchayatana style' and also shows the earliest small shikhara; therefore, option (b) is correct. The Bhitargaon Temple in Kanpur Nagar is not made of marble but is the

oldest temple constructed of 'baked bricks' (Terracotta/Bricks). The actual development of temple architecture comprising the garbhagriha, mandapa and shikhara took place during the Gupta period itself.

61. **Explanation:** The 'Yugantar' weekly newspaper was started in March 1906 to publicise the activities of the Anushilan Samiti (Statement 1 is correct). Its principal editors/managers included Bhupendranath Datta, the younger brother of Swami Vivekananda, and Barindra Kumar Ghosh, the brother of Aurobindo Ghose (Statement 2 is correct). This newspaper openly called for 'overthrowing the British through the use of force' and for armed revolution, thereby inspiring the youth (Statement 3 is correct).
62. **Explanation:** The French Revolution (1789) received its ideological foundation from the ideas of philosophers. In his book 'The Spirit of the Laws', Montesquieu propounded the idea of the separation of powers among the legislature, executive and judiciary. Rousseau stated in his book 'The Social Contract' that government is based on the 'General Will' of the people. Through his satirical style, Voltaire attacked the Catholic Church and absolutism. Therefore, all the above are correct.
63. **Explanation:** Sir Thomas Munro served as the Governor of Madras from 1820 to 1827 AD. The system introduced for the collection of land revenue in South India was the Ryotwari system. Thomas Munro and Captain Read were the founders of this system, and they first introduced it in Baramahal in Tamil Nadu. Subsequently, this system was introduced in Madras, parts of Bombay, Assam and Coorg (a part of present-day Karnataka), among other regions.
64. **Explanation:** The integration of the Indian princely states was carried out under the leadership of Sardar Vallabhbhai Patel and V.P. Menon. Under the 'Instrument of Accession', which the rulers of the princely states were made to sign for their

inclusion in the Union of India, they transferred three major subjects—Defence, External Affairs and Communications—to the Government of India, while retaining autonomy in internal matters. Therefore, option (a) is correct.

65. **Explanation:** Under Article 316, the Chairman and members of the UPSC are appointed by the President, and their term of office is six years or until the age of 65 years, whichever is earlier; therefore, Statements 1 and 2 are correct. Under Article 320 of the Constitution, the UPSC is an advisory body. Therefore, its recommendations and advice are merely advisory and are not binding on the Government; hence, Statement 3 is incorrect.
66. **Explanation:** Article 76 relates to the Attorney-General for India, who is the highest law officer of India. Article 83 relates to the duration of both Houses of Parliament. The Rajya Sabha is not subject to dissolution, and, as nearly as possible, one-third of its members retire every second year, whereas the Lok Sabha, unless sooner dissolved, continues for five years from the date appointed for its first meeting. Article 263 empowers the President to establish an Inter-State Council by order in the public interest. Article 300A relates to the Right to Property. After the 44th Constitution Amendment Act, 1978, the Right to Property is no longer a Fundamental Right but a constitutional right. Therefore, the correct matching is A-1, B-2, C-3, D-4.
67. **Explanation:** According to Article 109, a Money Bill cannot be introduced in the Rajya Sabha. After being passed by the Lok Sabha, it is transmitted to the Rajya Sabha. The Rajya Sabha must return it within 14 days, either with or without recommendations. The Lok Sabha may accept or reject all or any of the recommendations of the Rajya Sabha. If the Rajya Sabha does not return the Bill within 14 days, it is deemed to have been passed by both Houses in the form in which it was passed by the Lok Sabha. Therefore, Assertion (A) is correct. A Money Bill is introduced only in the Lok Sabha on the prior recommendation of the

President. Its constitutional basis is Article 109(1) and Article 117(1), whereas Article 110 defines a Money Bill. Reason (R) is also correct, but it does not explain the non-binding nature of the recommendations of the Rajya Sabha. Therefore, the correct answer is (b).

68. **Explanation:** The Fundamental Duties (Article 51A) are non-justiciable; that is, there is no provision for direct constitutional punishment merely on the ground of their violation. Therefore, Statement (c) is incorrect. They were borrowed from the then Soviet Union (USSR) through the 42nd Constitution Amendment Act, 1976, on the recommendation of the Swaran Singh Committee. The duty relating to the education of children between 6 and 14 years of age was added by the 86th Constitution Amendment Act, 2002.
69. **Explanation:** The idea of the institution of Lokpal and Lokayukta in India was derived from Sweden's 'Ombudsman' system, which was institutionalised in 1809. In India, the First Administrative Reforms Commission (1966) recommended the establishment of such an institution for the redressal of citizens' grievances and the control of corruption. Subsequently, the Lokpal and Lokayuktas Act, 2013 was enacted, which made statutory provision for the establishment of the institution of Lokpal at the Centre and Lokayukta in the States.
70. **Explanation:** According to Article 324, the Chief Election Commissioner may be removed from office only on the ground of proved misbehaviour or incapacity and through the same procedure as is applicable to a Judge of the Supreme Court; therefore, Statement (b) is correct. The Chief Election Commissioner's term of office is six years or until the age of 65 years, whichever is earlier. The Chief Election Commissioner and the other Election Commissioners have equal powers and receive equal salaries and allowances; in the event of any difference of opinion, the decision is taken by majority.

- 71. Explanation:** According to Article 171, the total number of members of a Legislative Council cannot exceed one-third of the total number of members of the Legislative Assembly and cannot be less than 40 (Statement 1 is correct). After the elected categories are accounted for, the Governor nominates the remaining members from the fields of art, literature, science, the co-operative movement and social service (Statement 2 is correct). According to Article 169, the Legislative Assembly must pass a resolution in favour of the creation or abolition of the Council by a majority of the total membership of the Assembly and by a majority of not less than two-thirds of the members present and voting. Parliament may thereafter create or abolish the Council by law. Therefore, Statement 3 is incorrect.
- 72. Explanation:** Adjournment is the suspension of a sitting by the Presiding Officer for a few hours, days or weeks. Prorogation is the official order issued by the President terminating an entire session of Parliament. Dissolution terminates the tenure of the Lok Sabha and leads to fresh elections (the Rajya Sabha is a permanent House). Adjournment sine die means adjourning a sitting without announcing the date of the next sitting, and it is done by the Presiding Officer.
- 73. Explanation:** The Central Information Commission is not a constitutional body but a statutory body established under the Right to Information (RTI) Act, 2005; therefore, Statement 1 is incorrect and Statement 2 is correct. The Chief Information Commissioner is appointed by the President on the recommendation of a selection committee comprising the Prime Minister as Chairperson, the Leader of the Opposition in the Lok Sabha and a Union Cabinet Minister nominated by the Prime Minister; therefore, Statement 3 is correct.
- 74. Explanation:** The Sixth Schedule of the Constitution (Article 244) relates to the administration of the tribal areas of Assam, Meghalaya, Tripura and Mizoram (AMTM). Manipur is not included in it; therefore, option (c) is the correct answer. Separate special provisions have been made under Article 371C of the Constitution for the administration of the hill areas of Manipur. The Sixth Schedule provides a framework of local self-government in specified tribal areas through autonomous districts and District and Regional Councils.
- 75. Explanation:** Article 243D(6) permits the State Legislature to make provision for reservation in Panchayats in favour of citizens belonging to backward classes, but the provision of such reservation is not constitutionally mandatory. Therefore, option (d) is correct.
- The normal duration of Panchayats is five years from the date of their first meeting. The constitution of a State Finance Commission every fifth year and the establishment of a State Election Commission for Panchayat elections are mandatory. Generally, Panchayats are constituted at the village, intermediate and district levels; however, in a State having a population not exceeding 20 lakh, it is not necessary to constitute a Panchayat at the intermediate level. The devolution of powers to Panchayats and their authorisation to levy taxes are provided for by a law enacted by the State Legislature.
- 76. Explanation:** According to Article 300(1), the Government of India may sue in the name of the 'Union of India' and may also be sued in the same name. A suit relating to a State Government is brought in the name of the concerned State. Therefore, option (a) is correct.
- 77. Explanation:** Julian Steward developed multilinear evolutionism. It rejects a single universal sequence of evolution for all cultures and accepts the possibility of multiple evolutionary paths under different environmental and historical conditions.
- Marvin Harris systematised cultural materialism. In this approach, the infrastructure related to production and reproduction is regarded as having the primary influence on social structure and superstructure.
- Clifford Geertz was a major scholar of interpretive anthropology. He emphasised understanding the symbols and meanings of culture through thick description. He adopted the term 'thick description' from Gilbert Ryle.
- A.R. Radcliffe-Brown explained social structure as a network of actually existing social relations. Therefore, option (a) is correct.
- 78. Explanation:** Hereditary haemophilia A and B are X-linked recessive disorders. The pathogenic genes associated with them are located on the X chromosome. A male has only one X chromosome. Therefore, when the pathogenic allele for haemophilia is present on his only X chromosome, the corresponding normal allele is not available on the Y chromosome, and the disease manifests itself. Females have two X chromosomes. One normal allele generally produces sufficient clotting factor; therefore, the disease is comparatively less common among females. Nevertheless, some carrier females may also exhibit bleeding symptoms. Therefore, both Assertion (A) and Reason (R) are correct, and the Reason correctly explains the Assertion.
- 79. Explanation:** Dermatoglyphics is the study of the epidermal ridges and their patterns found on the fingers, palms, toes and soles. The formation of these ridges begins during foetal life. Their major patterns become established at approximately 10.5–16 weeks, and their structural maturation may continue until approximately 24 weeks.
- Once formed, the basic ridge arrangement generally remains stable throughout life. The clarity of the impressions may change with age, and a deep injury may cause local changes. The principal fingerprint patterns are loops, whorls and arches. Francis Galton presented a threefold classification based on these patterns.
- Both genetic and prenatal environmental factors play a role in the formation of these patterns. Therefore, it is incorrect to state that the environment has no influence. Nevertheless, an

established pattern is not altered by the normal postnatal environment. Dermatoglyphics is used for individual identification in forensic science, the study of population variation and as an auxiliary indicator of certain chromosomal conditions; it is not an independent and definitive diagnostic test for any genetic disorder. Therefore, Statements 1 and 2 are correct, whereas Statement 3 is incorrect.

- 80. Explanation:** The earliest known evidence of the Oldowan is approximately 30 lakh years old. It involved the manufacture of simple tools such as hammerstones, cores, choppers and sharp flakes. Its earliest makers are not known with certainty, although it has traditionally been associated with early hominins, including *Homo habilis*.

The Acheulean technology developed subsequently, and its earliest published evidence is approximately 19.5 lakh years old. This technology was mainly associated with early *Homo*, particularly *Homo erectus*, and is famous for bifacial handaxes and cleavers.

The Mousterian was a prepared-core and flake-based technology of the Middle Palaeolithic, particularly associated with Neanderthals. During the Upper Palaeolithic, standardised blades and burin tools became more developed and prominent, mainly in association with *Homo sapiens*. Some chronological overlap among these technological traditions was also found in different regions, but the sequence of their first appearance corresponds to option (a).

- 81. Explanation:** Endogamy is the social rule according to which an individual is expected to marry within a specified social or religious group. In contrast, under exogamy, an individual is required to marry outside a specified kinship, clan or lineage group. Traditionally, among many Hindu caste groups, the rules of marriage within the caste or sub-caste and outside one's own gotra have existed simultaneously. Therefore, option (b) is correct.

- 82. Explanation:** Neanderthals lived approximately 4,00,000 to 40,000 years ago across Europe and from South-West Asia to Central Asia. They were primarily associated with the Mousterian stone-tool tradition of the Middle Palaeolithic period. Their cranial capacity generally ranged from approximately 1,200–1,750 cubic centimetres, and their average cranial capacity was somewhat greater than that of modern humans. They made controlled use of fire, produced refined flake tools and were skilled hunters of large animals. Evidence of the intentional burial of the dead has also been found at some sites. However, it is not appropriate to regard tools, food and flowers as regular grave goods, or burial as definite evidence of belief in an afterlife. Therefore, option (b) is correct.

- 83. Explanation:** In his 1941 formulation, 'The Hindu Method of Tribal Absorption', N. K. Bose explained that, owing to economic necessity, tribal groups become connected with the production system, occupational division of labour and market-exchange system of the wider Hindu society. In the example of the Juang community, making bamboo baskets and selling them to neighbouring communities, as well as adopting other supplementary occupations, demonstrates this economic association.

In this process, a tribal group could gradually move towards being absorbed as a new caste, generally occupying a low position in the caste-based social order. Nevertheless, some of its local religious and social traditions could continue to survive. Therefore, option (b) is correct.

- 84. Explanation:** 'Silent trade' is a distinctive form of barter in which two groups exchange goods without direct conversation or face-to-face contact. This arrangement is especially useful when the two parties lack a common language or when there is distrust, hostility or a risk associated with direct contact.

In this system, one party leaves its goods at a predetermined place and withdraws from there. The other party examines those goods, leaves the goods

it offers in exchange and departs. The first party returns and either accepts or rejects the offer. Upon acceptance, the exchange is completed. Therefore, its principal purpose is to conduct safe and peaceful barter without direct contact.

- 85. Explanation:** According to demographic transition theory, in the first, or pre-industrial, stage, both the birth rate and the death rate are high. Since the difference between them is small, population growth remains very slow. In the second stage, improvements in disease control, public health, sanitation and nutrition cause the death rate to decline rapidly, while the birth rate remains high for some time. This results in rapid population growth. In the subsequent stage, the birth rate also begins to decline. In the three-stage model, this is the final, third stage, while in the four-stage model, it is mainly the fourth stage, in which both birth and death rates are low and natural population growth becomes very low. Therefore, all three statements are correct.

- 86. Explanation:** Culture shock is the confusion, anxiety, psychological discomfort and disorientation that a person may experience on being separated from familiar cultural cues and entering an unfamiliar culture. During anthropological fieldwork, a researcher may also experience it because of differences in language, customs, behavioural norms and values. Adaptation may develop by learning the local language, engaging sensitively with the community and understanding its cultural norms. Therefore, option (b) is correct.

- 87. Explanation:** E. E. Evans-Pritchard distinguished between sorcery and witchcraft in the beliefs of the Azande community. Sorcery is an acquired magical technique involving magical rituals, spells and harmful medicinal substances. In contrast, witchcraft is regarded as an innate, hereditary and bodily power. External rituals, spells or medicines are not considered necessary for it. Its alleged effects may sometimes occur even without the individual's knowledge. Therefore, the correct answer is (a).

- 88. Explanation:** Age is estimated from the human skeleton on the basis of the available bones and the age group of the individual. In children, dental development and tooth eruption are particularly useful. Dental development involves observing the mineralisation of tooth enamel and the formation of the crown and root. In adolescents and young adults, the formation of the epiphyses of long bones and the stage of their fusion with the shaft of the bone are important age indicators.
- In adults, the pubic symphysis, the auricular surface of the ilium, the sternal ends of the ribs and other degenerative changes are examined jointly. Age is generally expressed as an estimated age range. Therefore, option (b) is correct.
- 89. Explanation:** Decisions concerning immunisation, family planning and menstrual hygiene, as well as stigma associated with mental illness, are not matters of isolated individual choice. They are shaped by the socio-cultural fabric within which an individual lives. Therefore, Assertion (A) is correct. Social psychology primarily analyses how the community, family, peer group and traditional beliefs shape an individual's behaviour and attitudes. Hence, local leadership and social dialogue are used to bring about behaviour change. Therefore, Reason (R) is also true and correctly explains Assertion (A).
- 90. Explanation:** According to Raymond Cattell, fluid intelligence (G_f) is a biological capacity that enables an individual to solve new problems without any prior knowledge and to identify patterns. In contrast, crystallised intelligence (G_c) is the accumulated knowledge acquired by an individual over the lifespan through education, formal training, language and cultural experiences. Fluid intelligence begins to decline gradually after adolescence, whereas crystallised intelligence continues to increase with age and experience. Therefore, the correct code is (a).
- 91. Explanation:** The scientific soundness of any psychological measure, such as an intelligence, stress or personality test, rests on three foundations: Reliability—which determines the consistency of measurement; Validity—which ensures that the test measures the specific attribute or criterion for which it was designed; and cultural appropriateness—which examines whether the language, examples and context of the test are suitable for the socio-cultural group concerned. Mere popularity or low cost cannot constitute a basis of scientific quality. Therefore, all three statements are true.
- 92. Explanation:** The classic example of 'seed and soil' demonstrates the dynamic interaction between heredity and environment. The seed (heredity) determines the inherent biological potential and limits of its development into a plant, whereas fertile soil, water and sunlight (environment) provide the opportunity and nourishment for that potential to flourish. Even a superior seed may perish in barren soil, while even providing fertiliser to a poor-quality seed may not produce superior fruit. Therefore, development is the result of the interaction between the two.
- 93. Explanation:** In Pavlov's experiment, food is an unconditioned stimulus (UCS), and salivation in response to it is a natural or Unconditioned Response (UCR). The bell is initially a neutral stimulus, but after being repeatedly associated with food, it becomes a 'Conditioned Stimulus' (CS). Thereafter, salivation merely upon hearing the sound of the bell is called a learned or 'Conditioned Response' (CR). Therefore, option (b) presents the correct and complete matching.
- 94. Explanation:** In the process of perception, an external stimulus, such as light or sound, first impinges upon a sense organ. The sensory receptor cells in the sense organ convert it into a 'neural impulse', which is transmitted by the nervous system to the sensory area of the brain. A primary 'sensation' is produced in the brain, which the individual organises and interprets on the basis of prior knowledge, expectations and context. This final stage is perception. Therefore, option (b) represents the correct scientific sequence.
- 95. Explanation:** Memory traces require some time to become permanently established and strengthened in the brain; this process is called 'consolidation'. If this process cannot be completed because of a head injury, extreme stress or some biological disruption, the encoded information cannot be transferred from short-term memory to long-term memory and is lost. This is called consolidation failure. It is distinct from retrieval failure or encoding failure.
- 96. Explanation:** Substance addiction is a multidimensional disease and a psychosocial problem. Instead of adopting a punitive attitude, a Health Education Officer should adopt a community-based approach. The officer's principal role is to identify at-risk adolescents, implement the Peer Educator model, counsel the family, motivate the affected person through motivational interviewing, link the person to de-addiction centres through referral and help prevent relapse after treatment.
- 97. Explanation:** A questionnaire is a list of written questions through which direct information is obtained from a respondent about his or her knowledge, opinions, facts or habits. In contrast, a rating scale provides an ordered and graded assessment of the degree, frequency or intensity of a behaviour, attitude, stress or psychological symptom, such as on a scale of 1 to 5 ranging from 'never' to 'always'.
- 98. Explanation:** Sensation is a primary and passive process in which the sense organs merely receive stimuli from the environment, such as smell, sound or light—for example, simply sensing an odour through the nose. When the brain connects that odour with prior experiences, memories and knowledge and interprets it as the fragrance of a rose, it becomes perception. Thus, sensation is the raw material, while perception is the meaningful mental product formed from that raw material.

- 99. Explanation:** According to the 'Drive-Reduction Theory' propounded by Clark Hull, when a biological need, such as the need for food or water, remains unmet, homeostasis is disturbed. This deficiency produces an internal state of tension called a 'drive' (internal urge). The individual engages in goal-directed behaviour to reduce this drive and restore physiological balance—for example, searching for food when hungry and reducing the tension by eating.
- 100. Explanation:** B. F. Skinner constructed the 'Skinner Box' to study operant conditioning and conducted his major experiments mainly on rats, which received a food pellet upon pressing a lever, and pigeons, which received grain upon pecking a key. He demonstrated that when a voluntarily performed behaviour is followed by a positive consequence (reinforcement), the probability of that behaviour being repeated increases considerably. Pavlov conducted experiments on dogs, whereas Thorndike conducted experiments on cats.
- 101. Explanation:** Human values may differ in their outward form according to culture, place and time. Therefore, Assertion (A) is true. The reason is that the philosophical and moral essence of values, such as truth, non-violence, service and compassion, remains universal and eternal. Indian thought has regarded these values not merely as ideas but has linked them with 'Svadharmā' and Nishkama Karma. Consequently, the internal moral framework of values remains intact despite changes in external social customs. Therefore, Reason (R) is also true and provides the correct and logical explanation of Assertion (A).
- 102. Explanation:** The agencies that enforce social control are divided into two categories: (1) Formal agencies—which are legally established by the State and are equipped with written rules and punitive power, such as law, police, courts and prisons. (2) Informal agencies—which control behaviour through primary socialisation, moral pressure and values, such as family, religion, neighbourhood, school and public opinion. Therefore, option (b) presents the correct and precise matching.
- 103. Explanation:** In 1935, Gordon Allport defined attitude as follows: "An attitude is a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related." Allport clarified that attitudes are not innate; rather, they are learned through socialisation and through experiences within the family and environment. Therefore, option (d) presents the incorrect statement.
- 104. Explanation:** In the developmental models of counselling, Misel Carroll presented four principal stages: (1) preparation, (2) assessment, (3) engagement and (4) termination. In contrast, the Indian psychologist S. N. Rao identified eight stages, including detailed processes extending from awareness of the need for assistance to the exploration of emotions, integration of the past and present, and obtaining benefits in practical life. Therefore, option (a) is correct.
- 105. Explanation:** The 'Limited Effects Theory' (Two-Step Flow Model), propounded by Paul Lazarsfeld and his associates, challenged the assumption that the media are all-powerful. According to the theory, instead of directly influencing the general public, media messages reach the 'opinion leaders' of society. Thereafter, people make decisions on the basis of interpersonal discussions, family relationships and prior preferences. Thus, the influence of the media is not unlimited but becomes 'limited' by social interactions.
- 106. Explanation:** The natural history of disease is the course of an illness from its onset to its outcome without any medical intervention. It has two stages: (1) Pre-pathogenesis stage—in this stage, the disease-causing agent is outside the body, but risks are present in the host and environment. (2) Pathogenesis stage—it begins with the entry of the pathogen into the body, followed by cellular changes, symptoms and, ultimately, recovery, disability or death as the outcome. Therefore, option (b) is true.
- 107. Explanation:** All three perspectives on social change are established: the cyclical theory holds that civilisations are born, flourish and perish, after which the cycle repeats. The functionalist theory regards society as an adaptive system that restores equilibrium after external shocks. The conflict theory, on the other hand, considers class conflict and the unequal distribution of resources to be the basis of change. Modern sociology accepts a synthesis of all three. Therefore, Statements 1, 2 and 3 are all correct.
- 108. Explanation:** In the communication process, the sender 'encodes' ideas, and the receiver derives meaning by 'decoding' them. Distortion arises when, owing to the receiver's own biases, differences in language or lack of attention, the receiver fails to interpret the message in accordance with the sender's original intention or sentiment. Successful communication requires alignment between encoding and decoding. Therefore, option (a) is correct.
- 109. Explanation:** Values guide our decision-making process. A sense of priority tells us what is more valuable in life. Morality clarifies the distinction between right and wrong. In relationships, values form the foundation of trust and empathy. Self-awareness provides a person with inner satisfaction and mental peace when they act in accordance with their inner values. Therefore, code (a) shows the correct matching.
- 110. Explanation:** The three components of the ABC model of attitude—the cognitive, affective and behavioural components—are interconnected. If a person's knowledge or thoughts about an object (cognition) change, their likes and dislikes towards it (affect) change, and their behaviour also changes accordingly. The tendency to maintain balance among these three components makes attitude dynamic. Therefore, a change in any one component also brings about changes in the other two components. Hence, option (b) is correct.

- 111. Explanation:** According to studies of persuasion, when the source delivering a message is an expert and is honest and credible, the audience accepts the message more readily. On the other hand, subliminal advertising—which claims to deliver hidden messages below the level of consciousness—has been found in scientific laboratory studies to have only a very limited, indeed negligible, effect on attitude change. Therefore, option (b) presents the correct and balanced conclusion.
- 112. Explanation:** According to the Oxford Dictionary, communication is “the process of successfully exchanging information, ideas, suggestions or feelings among individuals through speaking, writing or any other medium.” Communication is not merely the one-way transmission of information; it includes the sender transmitting the message, the receiver correctly understanding its meaning and providing feedback, thereby creating shared understanding.
- 113. Explanation:** Recall bias may occur particularly in retrospective case-control studies in which participants are asked to recall past exposures or habits. While attempting to identify the cause of their illness, a person suffering from cancer or another serious disease may recall and report certain past exposures to a greater extent or differently than control participants do; such recall is not necessarily more accurate. In contrast, control participants may forget such minor events or under-report them. This differential recall creates an artificial association in the data. Therefore, Reason (R) provides the correct explanation of Assertion (A).
- 114. Explanation:** The diffusion of new ideas in health education, such as vaccination, is understood through Rogers’ model. Innovators take risks and are the first to adopt an idea (A-1). Early adopters are respected opinion leaders in the community who provide social credibility to the innovation and reduce the uncertainty of other potential adopters (B-2). The late majority is sceptical and accepts the innovation only after most people have adopted it and under peer-group pressure (C-3). Laggards, who are the traditionalist last adopters, use the past and tradition as their principal frame of reference when making decisions and adopt the innovation last (D-4). Therefore, code (a) is correct.
- 115. Explanation:** The ‘Demand-Control Model’, proposed by Robert Karasek and subsequently developed by Karasek and Theorell, analyses psychosocial stress in the workplace. This theory explains that when the workload, deadlines or psychological demands of a job are extremely high, but the employee has little freedom or control to decide how the work is to be performed or how their skills are to be used, such a situation increases the likelihood of mental stress and job dissatisfaction and has been found to be associated with a somewhat increased risk of coronary heart disease; a direct causal relationship has not been conclusively established. Therefore, option (a) is correct.
- 116. Explanation:** During the nutrition transition, the spread of fast food, standardised processed food and sugar-sweetened beverages by multinational companies exemplifies McDonaldization in sociology, that is, broader social rationalisation based on the principles of the fast-food model, whereas Coca-colonisation is a metaphor for the global spread of American consumer and beverage culture. This trend may displace, transform or hybridise local dietary patterns, particularly nutritious traditional ones. Excessive consumption of energy-dense and highly processed diets rich in unhealthy fats, free sugars and sodium increases the risk and burden of obesity, hypertension, diabetes and cardiovascular non-communicable diseases in low- and middle-income countries. Therefore, all three statements are correct in the broader examination context.
- 117. Explanation:** Attrition bias arises in long-term longitudinal studies and clinical trials when the outcomes of participants lost to follow-up are unavailable and those participants differ systematically from the participants who remain in the study. If seriously ill patients or patients experiencing severe adverse effects of a drug are lost to follow-up and their outcomes cannot be recorded, the sample analysed at the end of the study may appear relatively healthy. In such a scenario, the drug or treatment may appear more effective and safer than it actually is; the direction of the bias depends on the participants who leave the study. Therefore, option (a) correctly represents the situation.
- 118. Explanation:** The relationship between education and health is understood in three ways: (1) direct causation (education → better health); (2) a third factor (intelligence affects both); and (3) reverse causation (health → education). ‘Reverse causation’ means that poor health becomes an obstacle to education. For example, if a child suffers from a serious or chronic illness during childhood, their school attendance and educational achievement may be disrupted, and the likelihood of completing their education may decline. Consequently, their income, social status and health may be adversely affected later in life.
- 119. Explanation:** The ‘National AIDS Control Programme’ was formally launched in India in 1992 with the objective of preventing the spread of the HIV/AIDS epidemic and reducing mortality. Under its institutional framework, the ‘National AIDS Control Organisation’ was established at the national level and ‘State AIDS Control Societies’ (SACS) were established at the state level. Under this programme, Integrated Counselling and Testing Centres (ICTCs) were established for free and confidential HIV counselling and testing, and Antiretroviral Therapy (ART) Centres were established and expanded during subsequent phases. ICTC and ART services were also linked with public health institutions and the referral system.

- 120. Explanation:** 'Positionality' clarifies that a person's social location—their gender, age, caste, class, education and physical ability—influences their perspective; it is also connected with the social context, power and privilege through which they view the world and health problems. Health-related advice or services that may appear accessible and practicable to an affluent urban doctor, such as eating fresh fruit or immediately undergoing an MRI scan, may be expensive, difficult or unavailable for a poor or rural patient. Therefore, healthcare providers should understand the patient's social positionality as well as their own professional positionality, assumptions and power relations.
- 121. Explanation:** Owing to the growing burden of non-communicable diseases in India, there has been a major shift in the pattern of causes of death. According to the World Health Organization and national data, cardiovascular diseases, particularly ischaemic heart disease and stroke, have been leading causes of death and major contributors to India's chronic disease burden. This situation underlines the need for primary prevention, control of risk factors, early detection and timely treatment within the health system.
- 122. Explanation:** Hands repeatedly come into contact with external surfaces, food and the face and may become a means of transmitting pathogens. According to various studies, washing the hands with soap and running water before cooking, serving or eating food and after using the toilet, rubbing all hand surfaces with soap for at least 20 seconds, rinsing them with clean water and drying them effectively breaks the faecal-oral transmission cycle. This simple practice reduces the risk of diarrhoea, faecal-oral infections such as cholera and typhoid, and many acute respiratory infections. Its effects on diarrhoeal and respiratory diseases vary; therefore, assigning a uniform rate of 30–40 per cent to all diseases is not appropriate. Hence, option (a) is correct.
- 123. Explanation:** Housing is an important physical and social determinant of health. In houses lacking fresh air, sunlight, clean water and toilets, and where many people live in a single room, overcrowding and poor ventilation may increase the risk of transmission of TB and other respiratory infections. Dampness and mould may aggravate the symptoms of asthma, but asthma is not a communicable disease. Unsafe water and poor sanitation increase the risk of waterborne diseases. In addition, unsafe housing increases mental stress and insecurity. Therefore, the statement given in option (c), that housing has no relationship with communicable diseases, is entirely false.
- 124. Explanation:** The direct effect of heredity on health is seen in diseases that manifest directly because of abnormalities in genes or chromosomes; such abnormalities need not necessarily be inherited from the parents in every case. Down syndrome, in which there is an additional copy of chromosome 21 in most cases, involves characteristic physical features and intellectual and developmental difficulties. In inherited forms of haemophilia, pathogenic changes in the F8 or F9 gene prevent the blood from clotting properly, and bleeding may continue for a prolonged period. This is a direct biological effect of heredity. In contrast, water pollution, air pollution and family income are environmental and socio-economic factors.
- 125. Explanation:** According to the report 'India: Health of the Nation's States', the proportion of deaths caused by non-communicable diseases in India—cardiovascular diseases, cancer, diabetes and chronic respiratory diseases—increased from 37.9% in 1990 to 61.8% in 2016; therefore, Statement 1 is correct. However, unlike developed nations, communicable diseases such as tuberculosis, malaria, dengue and diarrhoea have not been completely eliminated in India; therefore, Statement 2 is correct.
- Thus, the 'double burden of disease' involving communicable and non-communicable diseases is a major challenge for the Indian health system; therefore, Statement 3 is correct. Hence, all the statements are correct.
- 126. Explanation:** Malaria is caused by the Plasmodium parasite and is transmitted through the bite of a female Anopheles mosquito. Kala-azar (visceral leishmaniasis) is caused by the Leishmania parasite and is transmitted by the sandfly. Intestinal worms (Ascaris, etc.) spread among children through contaminated soil and poor sanitation and cause anaemia. Dengue and chikungunya are transmitted by the Aedes aegypti mosquito, which breeds in clean stagnant water. Therefore, (a) is the correct matching.
- 127. Explanation:** Maternal and child health is directly related to the socio-economic status of women in society; therefore, Assertion (A) is correct. Child marriage and a first pregnancy at a young age cause severe harm to the body of an adolescent girl. The practice of serving women last and giving them less nutritious food within the family causes anaemia. In addition, the absence of decision-making authority causes delays in reaching a hospital for childbirth, which is a major cause of maternal mortality. Therefore, Reason (R) is correct, and (R) correctly explains (A).
- 128. Explanation:** Neural tube defects (NTDs) are not infectious or contagious diseases; rather, they are 'congenital disorders' caused by the failure of the neural tube to close properly during the first 28 days of embryonic development. Therefore, Statement (d) is false. Their main cause is a deficiency of folic acid (vitamin B₉) during pregnancy. They can be prevented through folic acid supplementation and food fortification.
- 129. Explanation:** 'Hidden hunger' refers to micronutrient deficiencies. In this condition, a person consumes an adequate quantity of inexpensive and filling food, such as a diet consisting only of rice or wheat, which fulfils

their calorie requirements; however, because their diet lacks green vegetables, pulses and fruit, severe deficiencies of iron, zinc, iodine and vitamin A persist. It is a major cause of anaemia and delayed physical and mental development among children.

130. Explanation: According to data from the National Family Health Survey (NFHS-5), 2019-21, improvement was recorded in all three major nutritional indicators among children under five years of age in India. Stunting declined from 38.4% to 35.5%; wasting declined from 21.0% to 19.3%; and the prevalence of underweight declined from 35.8% to 32.1%. However, despite the improvement, these figures remain a major public health concern. Therefore, all the statements are correct.

131. Explanation: Women have two X chromosomes (XX); therefore, if a mutated gene is present on one X chromosome, the other normal X chromosome suppresses its effect, and the woman remains only a 'carrier'. Men, however, have one X and one Y chromosome (XY); therefore, if they inherit a defective X chromosome from their mother, there is no second X chromosome to counteract its effect, causing diseases such as haemophilia and Duchenne muscular dystrophy to manifest in men. Therefore, option (a) is correct.

132. Explanation: World Malaria Day is observed on 25 April; therefore, Statement 1 is correct. According to the National Strategic Plan for Malaria Elimination, India has set the target of achieving zero indigenous cases in the country by 2027 and making the country completely malaria-free by 2030; therefore, Statement 2 is correct. Statement 3 is incorrect because programmes for malaria elimination are not being discontinued; rather, they are being further strengthened through vector control, distribution of mosquito nets and rapid testing.

133. Explanation: The three main indicators of malnutrition are:

Wasting: Low weight-for-height. It results from recent acute malnutrition or illness, such as diarrhoea, in which the child becomes extremely thin.

Stunting: Low height-for-age. It indicates chronic malnutrition.

Underweight: Low weight-for-age.

134. Explanation: The main objective of the pre-disaster preparedness phase (Pre-disaster Phase) is to minimise damage and loss of life and property before a disaster occurs. It includes early-warning systems, mock drills, identification of flood shelters, stockpiling of life-saving medicines (ORS, chlorine tablets) and keeping rapid-response teams on alert. Merely constructing memorials several years after a disaster is not part of pre-disaster preparedness; therefore, option (c) is the correct answer.

135. Explanation: Uncontrolled solid waste creates various types of health risks. Biological decomposition in exposed waste promotes the breeding of flies and rats, which are vectors of plague/leptospirosis. Water accumulated in plastic articles and containers trapped in waste provides breeding sites for mosquitoes that transmit dengue (*Aedes*) and malaria (*Anopheles*). In addition, toxic leachate from waste enters the ground along with rainwater and contaminates groundwater. Therefore, all the options are correct.

136. Explanation: In India, kala-azar is a parasitic disease transmitted by the bite of 'Phlebotomus argentipes' (sandfly). Its traditional endemic distribution has primarily been in the humid rural areas with mud houses in four states—Bihar, Jharkhand, West Bengal and eastern Uttar Pradesh.

137. Explanation: Turner syndrome is a chromosomal disorder that affects only women/girls. A female typically has 46 chromosomes (44+XX), but a female affected by Turner syndrome lacks one X chromosome, reducing the total number of chromosomes to 45 (44+XO). Consequently, affected females have short stature and underdeveloped ovaries, and the onset of puberty and fertility are affected.

138. Explanation: To prevent heat stroke and dehydration caused by a heat wave, the Health Department

implements a 'Heat Action Plan'. It includes establishing public cooling shelters, ensuring the availability of ORS packets and cool drinking water, arranging intravenous (IV) drip facilities in the OPD, adjusting work timings (avoiding heavy labour between 12 noon and 3 p.m.) and advising the public to consume adequate fluids.

139. Explanation: Net indirect taxes mean total indirect taxes minus subsidies provided by the government. Therefore, the formula is—Net indirect taxes = Indirect taxes – Subsidies. Indirect taxes raise market prices, whereas subsidies may, through their effect on producers or consumers, keep market prices relatively lower. To obtain factor cost, net indirect taxes are deducted from market prices. If subsidies exceed indirect taxes, net indirect taxes may also be negative, but the basic relationship remains the same.

140. Explanation: In the Human Development Report, 2025, India's Human Development Index value for the year 2023 is 0.685 and its Inequality-adjusted Human Development Index value is 0.475. The difference between the two indicates that the average achievements in health, education and standard of living are not equally distributed among all sections of society. Inequality reduces the actual gains from human development. This index does not measure gender disparities alone; gender disparities are measured through the Gender Development Index and the Gender Inequality Index. The Inequality-adjusted Human Development Index reflects distributional loss across all three dimensions of overall human development.

141. Explanation: According to the Global Multidimensional Poverty Index, 2023, India's Multidimensional Poverty Index value was 0.283 in 2005-06, which declined to 0.069 in 2019-21. This indicates a reduction in the combined deprivations relating to health, education and standard of living. Nevertheless, 16.4 per cent of

the population was multidimensionally poor in 2019-21. Multidimensional poverty is not based solely on income; it includes indicators such as nutrition, child mortality, education, electricity, sanitation, drinking water, housing, cooking fuel and assets.

142. Explanation: Statement 1 is correct because the purpose of national income is to measure the factor income generated through the production process during a specified period. Statement 3 is also correct because compensation of employees is received in exchange for labour services. Statement 2 is incorrect. Pensions and donations are certainly monetary receipts, but no goods or services are provided in exchange for them during the current period. Therefore, they are called non-factor income or transfer income and are not included in national income. The mere receipt of money is not sufficient for its inclusion in national income.

143. Explanation: The concept of domestic territory is not based solely on geographical location. Although the embassy of a foreign country is located within the geographical boundaries of India, it is regarded as part of the economic territory of that foreign country. Therefore, the production activity taking place there is not included in India's domestic production. By the same reasoning, Indian embassies located abroad are regarded as part of India's domestic territory. This arrangement gives priority to economic jurisdiction in national accounting and clarifies the distinction between geographical boundaries and economic territory.

144. Explanation: Infrastructure affects the cost of production and access to markets. When facilities such as electricity, roads, water, ports and markets are better, industries can readily access raw materials, labour, transport facilities and sales networks. This reduces investment risks and costs and attracts private investment. States with weak infrastructure lag behind in the competition for development. This process increases regional

disparities because initially developed regions attract even more investment. Therefore, public investment in infrastructure is important in backward regions.

145. Explanation: The unemployment rate indicates the percentage of unemployed persons in the labour force. Therefore, its formula is—the number of unemployed persons divided by the total labour force and multiplied by 100. The total labour force includes both employed and unemployed persons. Taking the total population as the denominator would also include children, elderly persons and other persons outside the labour force, which would not clearly reflect the actual condition of the labour market. The unemployment rate and the labour force participation rate are different indicators; the former indicates unemployment within the labour force, whereas the latter indicates the proportion of the labour force in the population.

146. Explanation: The Human Poverty Index had been published in the Human Development Report since 1997. From 2010, the Multidimensional Poverty Index began to be published in its place. The Multidimensional Poverty Index is based on three dimensions—health, education and standard of living—and ten indicators. It was jointly developed by the Oxford Poverty and Human Development Initiative in collaboration with the United Nations Development Programme. It measures not merely a lack of income but the multiple deprivations experienced simultaneously. Therefore, option (a) presents the correct sequence.

147. Explanation: In national accounting, Net National Product at factor cost is called national income. 'Net' means that depreciation has been deducted from Gross National Product. 'National' means that the domestic product has been adjusted for net factor income from abroad. 'Factor cost' means that net indirect taxes have been deducted from market prices. Thus, national income represents the actual income received by the factors

of production—wages, rent, interest, profit and mixed income—with reference to normal residents.

148. Explanation: To obtain Net Domestic Product at factor cost, both depreciation and net indirect taxes are deducted from Gross Domestic Product at market prices. Net Domestic Product at factor cost = Gross Domestic Product at market prices – Depreciation – Net indirect taxes. Therefore, the calculation will be— $1,000 - 100 - 80 = 820$ crore rupees. Net factor income from abroad has not been given; therefore, it cannot be called national income.

149. Explanation: Gross Domestic Product at market prices is calculated through the expenditure method. Its formula is—Gross Domestic Product = Private consumption + Investment + Government expenditure + (Exports – Imports). According to the given data, domestic product (GDP) = $500 + 150 + 200 + (100 - 80) = 870$ crore rupees. Exports represent expenditure by foreigners on domestic production and are therefore added; imports, although included in the country's total expenditure, are produced abroad and are therefore deducted. The difference between exports and imports is called net exports, which is 20 crore rupees here. Therefore, the total national product will be $850 + 20 = 870$ crore rupees.

150. Explanation: The Global Multidimensional Poverty Index is based on the Alkire-Foster method. This method does not merely examine a person's income; rather, it identifies deprivations across various indicators of health, education and standard of living. When a person's combined deprivations reach the prescribed threshold, that person is considered multidimensionally poor. This approach helps in understanding both the incidence and intensity of poverty. The Lorenz curve and the Gini coefficient are related to the measurement of income inequality, whereas the Alkire-Foster method was developed for multidimensional deprivation.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Set-9

Answer key

1. (a)	2. (b)	3. (d)	4. (a)	5. (a)	6. (a)	7. (b)	8. (b)	9. (b)	10. (b)
11. (b)	12. (b)	13. (b)	14. (d)	15. (d)	16. (c)	17. (c)	18. (a)	19. (a)	20. (a)
21. (a)	22. (a)	23. (a)	24. (d)	25. (d)	26. (d)	27. (a)	28. (a)	29. (a)	30. (a)
31. (a)	32. (a)	33. (b)	34. (b)	35. (c)	36. (a)	37. (a)	38. (b)	39. (a)	40. (b)
41. (a)	42. (c)	43. (b)	44. (b)	45. (a)	46. (d)	47. (b)	48. (d)	49. (a)	50. (a)
51. (a)	52. (a)	53. (b)	54. (a)	55. (c)	56. (b)	57. (b)	58. (b)	59. (b)	60. (b)
61. (a)	62. (b)	63. (d)	64. (c)	65. (a)	66. (b)	67. (d)	68. (b)	69. (a)	70. (d)
71. (c)	72. (b)	73. (d)	74. (a)	75. (b)	76. (a)	77. (b)	78. (c)	79. (b)	80. (a)
81. (b)	82. (a)	83. (c)	84. (d)	85. (a)	86. (b)	87. (b)	88. (b)	89. (a)	90. (a)
91. (a)	92. (b)	93. (b)	94. (b)	95. (a)	96. (b)	97. (c)	98. (b)	99. (b)	100. (d)
101. (a)	102. (a)	103. (d)	104. (b)	105. (b)	106. (b)	107. (a)	108. (b)	109. (a)	110. (b)
111. (b)	112. (b)	113. (a)	114. (a)	115. (d)	116. (a)	117. (a)	118. (b)	119. (a)	120. (b)
121. (a)	122. (a)	123. (b)	124. (a)	125. (b)	126. (c)	127. (b)	128. (a)	129. (c)	130. (a)
131. (b)	132. (a)	133. (d)	134. (b)	135. (b)	136. (a)	137. (b)	138. (b)	139. (d)	140. (d)
141. (c)	142. (d)	143. (a)	144. (a)	145. (b)	146. (d)	147. (d)	148. (d)	149. (a)	150. (a)

Explanation

1. **Explanation:** The constitutional provision for the National Commission for Scheduled Castes is contained in Article 338. The provision for the National Commission for Scheduled Tribes is contained in Article 338A. Article 338A was inserted by the 89th Constitution Amendment Act, 2003, and this Commission came into existence on 19 February 2004. The National Commission for Backward Classes was granted constitutional status by the 102nd Constitution Amendment Act, 2018. Its provision is contained in Article 338B, which came into effect on 15 August 2018. The constitutional provision for the Election Commission of India is contained in Article 324. Therefore, only option (a) is correctly matched.
2. **Explanation:** Articles 29 and 30 relate to Cultural and Educational Rights under Part-III of the Constitution. Article 29(1) grants any section of citizens residing in the territory of India or any part thereof the right to conserve its distinct language, script or culture. Article 29(2) prohibits denying any citizen admission to an educational institution maintained by the State or receiving aid out of State funds solely on the grounds of religion, race, caste or language. Article 30(1) grants minorities based on religion or language the right to establish and administer educational institutions of their choice.
3. **Explanation:** The legendary playback singer Asha Bhosle passed away on 12 April 2026 at the age of 92. A day before her death, she had been admitted to hospital due to extreme exhaustion and a chest infection. During a career spanning more than eight decades, she recorded thousands of songs in several languages. She was awarded the Dadasaheb Phalke Award for the year 2000 and the Padma Vibhushan in 2008. In 1997, she became the first Indian female singer to receive a Grammy nomination for the album Legacy. She had not been awarded the Bharat Ratna. In 2015, the Bharat Ratna was awarded to Atal Bihari Vajpayee and Pandit Madan Mohan Malaviya. Therefore, statement (d) is false.
4. **Explanation:** In the Uttar Pradesh Legislative Assembly election results announced on 10 March 2022, the Bharatiya Janata Party won 255 seats. Its allies, Apna Dal (Soneylal) and the NISHAD Party, secured 12 and 6 seats respectively. Thus, the BJP-led alliance won 273 out of the total 403 seats. This was more than two-thirds of the total seats. The Bharatiya Janata Party received 41.29 per cent of the votes. The Samajwadi Party-led alliance secured a total of 125 seats. NOTA received 6,37,313 votes, that is, 0.69 per cent of the votes. Therefore, option (a) is correct.
5. **Explanation:** After the Bharatiya Janata Party secured a clear majority in the Uttar Pradesh Legislative Assembly elections, 2022, Yogi Adityanath took the oath of office as Chief Minister for the second consecutive time on 25 March 2022. Governor Anandiben Patel administered the oath of office and secrecy to him at the Bharat Ratna Shri Atal Bihari Vajpayee Ekana Cricket Stadium in Lucknow. Keshav Prasad Maurya and Brajesh Pathak were appointed Deputy Chief Ministers in the Yogi government-2.0. In 2022, Yogi Adityanath was elected a member of the Legislative Assembly from the Gorakhpur Urban Assembly constituency. Therefore, option (a) is correct.
6. **Explanation:** According to Article 64, the Vice-President is the ex officio Chairman of the Rajya Sabha, but is not a member of the Rajya Sabha. According to Article 66, the Vice-President is elected by an electoral college consisting of members of both Houses of Parliament. Elected and nominated members of Parliament participate in it, but members of the State Legislative Assemblies do not. According to Article 67, the Vice-President holds office for a term of five years from the date on which he assumes office. Even after the expiry of his term, he continues in office until his successor assumes office. A resolution for his removal can be initiated only in the Rajya Sabha. It must be passed by a majority of all the then members of the Rajya Sabha and approved by the Lok Sabha. At least fourteen days' prior notice is also required for this. Therefore, statements 1, 3 and 4 are correct, while statement 2 is incorrect.
7. **Explanation:** The scientific study of rocks is called petrology. The Earth's crust is composed of different types of rocks. A rock consists of one or more minerals; some rocks, such as limestone, may also consist of a single mineral. On the basis of their mode of formation, the three types of rocks are igneous, sedimentary and metamorphic. Therefore, option (b) is correct.
8. **Explanation:** The location below the Earth's surface where an earthquake originates is called the focus or hypocentre. The point on the Earth's surface directly above the focus is called the epicentre, where earthquake tremors are generally felt first. The impact may be greater near the epicentre, but the actual damage depends on the local geological structure, the depth of the earthquake and building construction. Therefore, option (b) is correct.
9. **Explanation:** Black soil is formed by the weathering and erosion of basaltic lava. It is highly suitable for cotton cultivation and has a high water-holding capacity. When wet, black soil swells and becomes sticky, and when dry, it becomes hard and develops cracks. For this reason, it is called self-ploughing soil. Therefore, option (b) is the correct answer.
10. **Explanation:** At present, India has 28 states and 8 Union Territories. On 26 January 2020, Daman and Diu and Dadra and Nagar Haveli were merged to form a single Union Territory. Therefore, option (c) is incorrect. Thus, in terms of administrative divisions, option (b) alone is the correct answer.

11. **Explanation:** The Earth is called the 'Blue Planet' because of the abundance of water on it. The Earth is the third planet in order of distance from the Sun and the fifth-largest in size. It has a geoidal shape; that is, it is flattened at the poles. The Earth has an axial tilt of 23.44° , which, together with its revolution, causes seasonal changes. The Moon is the Earth's only natural satellite. Therefore, option (b) is correct.
12. **Explanation:** Laterite soil is formed in regions with high temperatures and heavy rainfall. This process occurs mainly due to leaching and intense chemical weathering. This soil is rich in iron oxide and aluminium oxide. It is mainly found in Kerala, Odisha, the Chota Nagpur Plateau, Meghalaya and the mountainous regions of the Western Ghats. It is considered suitable for cocoa, cashew, tea and cardamom. Therefore, option (b) is correct.
13. **Explanation:** The Bhakra-Nangal Project is located on the Sutlej River. According to the material, it is associated with Punjab and Himachal Pradesh. The Bhakra Dam is a straight concrete gravity dam 225.55 metres high. The reservoir behind it is called Gobind Sagar Lake. Punjab, Haryana, Rajasthan, Delhi and Chandigarh benefit from its water, while Punjab, Haryana, Rajasthan, Himachal Pradesh and Chandigarh benefit from its electricity. Therefore, option (b) is correct.
14. **Explanation:** On 19 July 1969, 14 major Indian scheduled commercial banks were nationalised. The objective was to deploy banking resources in accordance with the priorities of national development and extend institutional credit to more people and economic activities. The Monopolies and Restrictive Trade Practices Act, 1969, came into force on 1 June 1970. Its objective was to prevent the harmful concentration of economic power, control monopolies and prohibit monopolistic and restrictive trade practices. The Foreign Exchange Management Act, 1999, came into force on 1 June 2000 and repealed the Foreign Exchange Regulation Act, 1973. The first two developments belonged to the era of economic controls, while FEMA was part of the post-liberalisation foreign exchange management system. Therefore, all three pairs are correct.
15. **Explanation:** At a beauty pageant held in Jaipur on 23 August 2026, 19-year-old Kaziah Liz Mejo from Mavelikkara, Kerala, was crowned 'Miss Universe India 2026'. With this, she became the first woman from Kerala to win this title. A law student and trained classical dancer, Kazia had previously been the first runner-up at 'Miss Teen International 2025'. She will represent India at the 75th Miss Universe pageant to be held in Puerto Rico in November 2026.
16. **Explanation:** Statement (c) is false because modern remote sensing, satellite imagery and artificial intelligence (AI)-based data modelling have been extensively used in preparing this map. Released by the National Bureau of Soil Survey and Land Use Planning (NBSS&LUP), this is the country's first soil texture map, which provides information at the hectare level. By showing the proportions of sand, silt and clay, it will help farmers and planners assess water-holding capacity and select crops.
17. **Explanation:** It has been announced that the renowned Odia poet and essayist Ashutosh Parida will be honoured with the 47th Sarala Puraskar 2026 for his poetry collection 'Biswas De Pruthibi'. The award ceremony will be held in Bhubaneswar on 25 October 2026. Instituted in 1980, this award carries 7 lakh rupees, a copper plaque and a citation. In addition, the 'Ila-Bansidhar Panda Kala Samman' for 2026 has been awarded to Guru Durga Charan Ranbir and sculptor Damodar Behera.
18. **Explanation:** Under the Rashtriya Vayoshri Yojana, free assistive devices are provided to eligible senior citizens with age-related disabilities or infirmities. Eligible beneficiaries include senior citizens in the BPL category or with a monthly income of up to ₹15,000. The scheme provides the devices required for low vision, hearing impairment, loss of teeth and mobility difficulties. Its objective is to improve the mobility, independence and quality of life of older persons. Therefore, option (a) is correct.
19. **Explanation:** Health education is of particular importance in schools because childhood is a crucial stage for the formation of healthy habits, and children are the citizens of the future. Schools provide children with appropriate opportunities to learn about hygiene, balanced nutrition, regular physical activity, mental health and safe behaviour. This develops health awareness, responsible decision-making and a healthy lifestyle among them. These habits also have a positive impact on the health of families and society in the long run. Therefore, option (a) is correct.
20. **Explanation:** Buildings, equipment, vehicles and materials are material resources. Volunteers, experts and trained individuals are human resources. Networks, membership lists and partner institutions are social-organisational resources. Credibility, public support and social legitimacy are related to moral resources. Therefore, the correct matching is A-3, B-4, C-1 and D-2. Thus, option (a) is correct.
21. **Explanation:** In collective mobilisation, two-way dialogue is conducted with the community. This dialogue helps in understanding the community's actual needs, problems, priorities, available resources and possible solutions. Clear goals, an action plan and evaluation indicators are determined on this basis. Coordination among partners, arranging resources, continuous feedback and evaluation of progress are also important in this process. Therefore, option (a) is correct.
22. **Explanation:** To expand his empire, Akbar launched the first attack on Baz Bahadur, the ruler of Malwa, in 1561 AD under the leadership of Adham Khan and Pir Muhammad Khan. In the Battle of Haldighati in 1576 AD, Akbar's commander was Man Singh. In the south, Akbar conquered Khandesh in 1601 AD. The kingdom of Mewar had not accepted Akbar's sovereignty. After Rana Pratap's death, Rana Amar Singh concluded a treaty with Jahangir in 1615 AD.

- 23. Explanation:** Dara Shikoh was the son of Shah Jahan and Mumtaz Mahal. Because of his tolerance and liberality, Lane-Poole called him 'Little Akbar'. He translated the Upanishads into Persian under the title 'Sirr-i-Akbar', and 'Majma-ul-Bahrain' was his original work. He was not Aurangzeb's son but his elder brother.
- 24. Explanation:** The First Buddhist Council was held in 483 BCE in the Saptaparni Cave at Rajagriha during the reign of Ajatashatru, under the presidency of Mahakashyapa. The Second Council was held in 383 BCE at Vaishali during the reign of Kalashoka, under the presidency of Sabbakami. The Third Buddhist Council was held in 247 BCE at Pataliputra during the reign of Ashoka, under the presidency of Moggaliputta Tissa. The Fourth Buddhist Council was held in the first century CE at Kundalvana, Kashmir, during the reign of Kanishka, under the presidency of Vasumitra. Therefore, all the pairs are correct.
- 25. Explanation:** Lord Dalhousie served as Governor-General of India from 1848 to 1856 AD. He implemented the Doctrine of Lapse and annexed states such as Satara, Jhansi and Nagpur. The first regular passenger railway service began in 1853 AD. Sir Charles Wood's Despatch on education was issued in 1854 AD. In 1856 AD, Awadh was annexed on charges of misgovernment. Therefore, all the statements are correct.
- 26. Explanation:** In the Delhi Sultanate, the Diwan-i-Qaza was a principal organ of the judicial system, and the chief qazi was called the Qazi-ul-Quzat. In large towns, there was a judicial officer called the Amir-i-Dad, who could bring before the court influential persons whom an ordinary qazi could not control. Criminal law applied equally to both Hindus and Muslims.
- 27. Explanation:** Chandragupta Maurya defeated Seleucus Nicator in 305 BCE. Later, Seleucus Nicator gave his daughter Cornelia or Helena in marriage to Chandragupta and gave some provinces as dowry. Seleucus's ambassador Megasthenes came to Chandragupta's court and wrote a book titled 'Indica'. 'Arthashastra' is a work by Chanakya or Kautilya.
- 28. Explanation:** The Muslim League observed Direct Action Day on 16 August 1946. Subsequently, the Interim Government was formed under the leadership of Jawaharlal Nehru on 2 September 1946. The Mountbatten Plan for the partition of India was announced on 3 June 1947. India became independent on 15 August 1947 under the Indian Independence Act. Therefore, the correct chronological order is Direct Action Day, the Interim Government, the Mountbatten Plan and the attainment of independence.
- 29. Explanation:** Agricultural products have certain specific problems, such as being generally perishable, bulky and seasonal in nature, which makes transportation and storage expensive. A farmer's share in the total supply is small, and the demand for agricultural products is inelastic. Therefore, the farmer operates in a buyer's market and cannot independently determine the price. This is why storage, transportation, grading and regulated markets assume greater importance in agricultural marketing.
- 30. Explanation:** Spraying is classified on the basis of the volume of spray mixture used per unit area. According to the general guideline ranges for field crops, high-volume spraying uses 300–500 litres per hectare of spray liquid, low-volume spraying uses 50–150 litres per hectare, and ultra-low-volume spraying uses less than 5 litres per hectare. This makes it clear that the volume of liquid is an important technical parameter in spraying. An incorrect volume can affect control efficacy, cost and environmental risk.
- 31. Explanation:** The purpose of plant quarantine is to prevent the entry of pests, diseases and other harmful organisms from outside. The cottony cushion scale is native to Australia. The San Jose scale is considered to have originated in East Asia, particularly northern China. It is a polyphagous pest of many deciduous fruit trees, including apple. The woolly apple aphid is a major pest of apple and is native to eastern North America. Plant quarantine and legislative control are essential to prevent the entry and spread of exotic pests such as these.
- 32. Explanation:** The Utera method is also called relay cropping. In this method, green gram or black gram seeds are broadcast in the field 7-10 days before paddy is harvested. This ensures the timely establishment of the next crop and better utilisation of soil moisture. The process of removing fuzz from cotton seeds is delinting, whereas the process of rotting jute in water is called retting. Therefore, the Utera method is related to the relay sowing of a pulse crop.
- 33. Explanation:** A trophic web, or food web, is a network formed by several interconnected food chains in nature. The complexity of a food web alone does not guarantee ecological stability; stability also depends on its structure, the strength of interactions and the measure of stability used. However, this should not be stated as a universal or definitive rule. Ecological stability is multidimensional; it is understood in terms of variability, resistance, resilience/recovery, persistence and, in some contexts, invasion resistance. Productivity is an ecological function whose temporal stability can be measured separately. Therefore, option (b) is correct.
- 34. Explanation:** In heterotrophic nutrition, organisms depend directly or indirectly on other organisms for food. Holozoic nutrition involves the ingestion, digestion and absorption of food, as exemplified by humans. In saprotrophic nutrition, organisms obtain nourishment from dead and decaying matter, as do many fungi, such as mushrooms and bread mould. In parasitic nutrition, organisms obtain nourishment by living on or inside a living host. The third pair does not describe parasitic nutrition; producing one's own food is a characteristic of autotrophic nutrition, so only two pairs are correct.
- 35. Explanation:** Dental enamel or enamel is the hard outer layer that covers the crown of a tooth; the occlusal surface is also part of this layer. It is composed mainly of calcium-phosphate hydroxyapatite crystals. It gives the tooth hardness

and wear resistance and protects the internal tissues during chewing. It is incorrect to consider it a soft surface, describe it as being composed of protein and fat, or associate it with the tongue. Therefore, option (c) is the correct answer.

36. **Explanation:** A concave mirror is a spherical mirror whose reflecting surface curves inwards, that is, towards the centre of the sphere. When a tooth is placed between the pole and the focus of the mirror, an enlarged, erect and virtual image of it is formed; therefore, dentists use concave mirrors. Concave mirrors are also used as reflectors in torches, vehicle headlamps/headlights and searchlights. They are also used as shaving mirrors. Convex mirrors are generally used as side/rear-view mirrors in vehicles because they provide a wide field of view and an erect, diminished image. Therefore, option (a) is correct.

37. **Explanation:** In energy transformation, the form of energy changes, but the total energy of an isolated system remains conserved. An electric fan converts electrical energy into mechanical energy. An electric cell converts chemical energy into electrical energy. In a candle, chemical energy is converted into light and heat energy. In photosynthesis, the energy of sunlight is converted into chemical energy. Therefore, among the given options, only the following pair is correct: option (a), Electric fan—electrical energy to mechanical energy.

38. **Explanation:** AIDS is the most advanced stage of HIV infection; HIV is its causative virus. More precisely, this virus is an enveloped RNA retrovirus of the genus *Lentivirus* in the family *Retroviridae*. It attacks the body's immune system and primarily infects and destroys CD4⁺ helper T-lymphocytes. It produces a DNA copy of its viral RNA in target cells with the help of reverse transcriptase. Therefore, option (b) is correct.

39. **Explanation:** In electrostatic equilibrium, if there is no charge in the cavity of a conductor, the electric field inside the cavity is zero. The excess or net charge of a conductor with a charge-free cavity is distributed over its outer surface. A

closed hollow conductor shields its charge-free cavity from an external static electric field. A fully enclosed vehicle with a rigid metal roof and a metal outer shell can provide good protection against lightning because the lightning current flows mainly through its outer metallic shell. The surface charge density is greatest at the pointed part of a conductor. Therefore, option (a) is correct.

40. **Explanation:** Divya Singh of Uttar Pradesh made history by cycling from Kathmandu to Everest Base Camp. She became the first woman from India and the second in the world to do so. She completed this challenging journey in 14 days amid extreme cold (-12°C) and low oxygen levels. On this route at an altitude of 17,560 feet (5,364 metres), she completed her journey by carrying the bicycle on her shoulders and moving ahead through stretches with difficult tracks.

41. **Explanation:** Senior Supreme Court advocate Menaka Guruswamy took the oath on 6 April 2026 as a newly elected Rajya Sabha member of the All India Trinamool Congress from West Bengal. With this, she became India's first openly LGBTQ+ Member of Parliament. She was among the lead advocates in the 2018 case of 'Navtej Singh Johar v. Union of India'. In this case, the Supreme Court declared unconstitutional the part of Section 377 of the then Indian Penal Code that criminalised consensual same-sex relations between adults.

42. **Explanation:** The foundation stone of Vantara University has been laid in Jamnagar, Gujarat. It has been presented as the world's first integrated global university dedicated to wildlife conservation and veterinary science. Its academic approach is inspired by the ideals of the ancient Nalanda University and Indian knowledge traditions. The university's proposed programmes include wildlife medicine and surgery, nutrition, behavioural science, genetics, epidemiology, One Health and conservation policy. One Health is an integrated approach based on the interdependence of the health of humans, animals, plants and ecosystems.

43. **Explanation:** In the financial year 2025-26, the Amul brand's total annual revenue, excluding double counting, crossed ₹1 lakh crore, that is, ₹1 trillion. Thus, Amul became India's first FMCG brand to achieve this milestone. The Amul brand's total turnover increased by about 11% from approximately ₹90,000 crore in the financial year 2024-25. Meanwhile, the Gujarat Co-operative Milk Marketing Federation, which markets Amul products, recorded its own sales turnover of ₹73,450 crore, which was 11.4% higher than in the previous financial year. The figure of ₹1 lakh crore represents the total sales, excluding double counting, of the wider Amul brand and its co-operative network.

44. **Explanation:** Lieutenant General Susan Coyle assumed office as the Australian Army's 42nd Chief of Army on 8 July 2026. She is the first woman to be appointed to this position in the Australian Army's 125-year history. She succeeded the former Chief of Army, Lieutenant General Simon Stuart. Susan Coyle began her military service as a soldier in the Australian Army Reserve in 1987. She has served as an officer in the 'Royal Australian Corps of Signals' and has been deployed in Afghanistan, the Middle East, Timor-Leste and the Solomon Islands.

45. **Explanation:** Length of the rectangular parallelogram = 5 cm
Width = 4 cm
Height = 3 cm
Volume = Length × Width × Height
= 5 × 4 × 3
= 60 cm³

46. **Explanation:** Let the numbers be 7x and 3x.
According to the question, 4x = 48
x = 12

$$\therefore \text{Sum of the numbers} = 7x + 3x \\ = 10x \\ = 10 \times 12 = 120$$

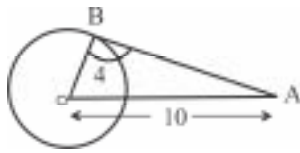
47. **Explanation:** $x - \frac{1}{x-1} = 3$

$$(x-1) - \frac{1}{(x-1)} = 3-1$$

$$(x-1) - \frac{1}{(x-1)} = 2$$

$$\therefore (x-1)^2 + \frac{1}{(x-1)^2} = (2)^2 + 2 = 6$$

48. Explanation:



In $\triangle OBA$ —

$$AB = \sqrt{OA^2 - OB^2}$$

$$AB = \sqrt{10^2 - 4^2}$$

$$AB = \sqrt{84}$$

$$AB = 2\sqrt{21}$$

49. Explanation: Product of two consecutive prime numbers = 7387

$$= 83 \times 89$$

The consecutive prime numbers will be 83 and 89.

$$\therefore \text{Difference} = 89 - 83 = 6$$

50. Explanation:

Number = 379843

Sum of the digits

$$= 3 + 7 + 9 + 8 + 4 + 3 = 34$$

$$= 33 + 1 \rightarrow \text{Remainder}$$

51. Explanation: Bronislaw Malinowski studied Kula exchange among the Trobriand Islanders and established participant observation as a major method of anthropological fieldwork. E.E. Evans-Pritchard studied witchcraft, oracular practices and magic among the Azande tribe. Margaret Mead studied adolescent girls in Samoa, a study she presented in 'Coming of Age in Samoa'. Prof. L.P. Vidyarthi studied the Maler community of the Rajmahal Hills, also known as the Sauria Paharia, and propounded the concept of the 'Nature-Man-Spirit Complex'. Therefore, the correct matching is A-3, B-4, C-1 and D-2.

52. Explanation: In individuals with blood group AB, both A and B antigens are present on the surface of red blood cells, whereas the plasma generally contains neither anti-A nor anti-B antibodies. Therefore, under the ABO system, a person with blood group AB can receive compatible red blood cell components from groups A, B, AB and O. Thus, the Reason correctly explains the Assertion.

53. Explanation: Hb^S is formed due to a point mutation in the Hb^B gene. This mutation replaces glutamic acid with

valine at the sixth position of the beta-globin chain of haemoglobin. The Hb^A Hb^S heterozygous state is called sickle cell trait or the carrier state.

This condition provides partial genetic protection, particularly against severe Plasmodium falciparum malaria. Owing to this heterozygote advantage, the HbS allele has persisted in regions historically affected by malaria, which is called balanced polymorphism.

Sickle cell disease exhibits autosomal recessive inheritance, but it is not confined to tribal populations alone. In India, its prevalence is higher in tribal communities, but it is also found in non-tribal communities. Thus, statements 1 and 3 are correct, whereas statement 2 is false.

54. Explanation: Based on typical or representative cranial capacity values, the correct ascending order is as follows: Australopithecus (approximately 400–500 cc) → Homo habilis (approximately 600–800 cc) → Homo erectus (approximately 800–1100 cc) → Homo neanderthalensis (on average approximately 1450–1500 cc). Therefore, option (a) is correct.

55. Explanation: Ethnocentrism is the tendency in which a person evaluates other cultures by treating their own culture as the standard and often considers their own culture superior. In contrast, cultural relativism holds that a culture's beliefs, practices and behaviours should be understood within that culture's own social, historical and cultural context, rather than by the standards of an external culture. The development of cultural relativism is primarily associated with the anthropological work of Franz Boas. It does not mean automatically regarding every cultural practice as right, but rather understanding it in its context before evaluating it. Therefore, option (c) is correct.

56. Explanation: Mitochondrial DNA is an example of cytoplasmic inheritance, and its inheritance is generally maternal. Both sons and daughters receive mitochondrial DNA from their mother, but only daughters transmit it to the next generation. Sons generally do not pass on their

mitochondrial DNA to their offspring. Mitochondrial DNA does not follow the usual Mendelian laws as genes on nuclear chromosomes do, and it generally does not undergo regular meiotic recombination of the kind seen in nuclear DNA. Therefore, it is used to study the matrilineal history, origins and migration of human populations. "Mitochondrial Eve" refers to the most recent common matrilineal female ancestor of present-day humans, not to the only woman of her time.

57. Explanation: According to B.K. Roy Burman, some tribes located in frontier and contact zones played the role of a 'bridge' or 'buffer' between powerful political-cultural communities. Bridge communities served as links for trade, barter, communication and other contacts. The Toto tribe played such a role between the Koch region and Bhutan. In contrast, buffer communities occupied an intermediate position between two influential neighbouring groups, keeping them apart or limiting their direct contact. The Kuki group of tribes in Manipur and the surrounding areas is a major example of this. Therefore, option (b) is correct.

58. Explanation: Malinowski conducted a detailed study of the Kula ring practised in the Trobriand Islands and the neighbouring Massim archipelago. This was not ordinary cash or market trade, but a formal, ritual and prestige-based gift exchange. In this exchange, the soulava necklace made of red shell discs circulated clockwise, while the mwali armband made of white shell circulated anticlockwise. Participants did not keep these objects permanently, but passed them on to a designated Kula partner after some time. This system strengthened enduring partnerships, reciprocal obligations, trust, inter-island contact and social prestige. Therefore, option (b) is correct.

59. Explanation: Sex relates to the biological and physical characteristics – such as chromosomes, hormones and reproductive organs – of an individual. In contrast, gender refers to socially constructed norms, roles, behaviours, expectations and relationships. Gender roles can vary across societies and over

time. Thus, although sex and gender are interrelated, they are not synonymous. Margaret Mead's comparative studies of different communities demonstrated that many behavioural expectations associated with femininity and masculinity are not universal, but are significantly influenced by culture and socialisation.

- 60. Explanation:** In fieldwork, a key informant is a person with specialised knowledge of the community or study setting. An ordinary informant may be anyone who provides information to the researcher, whereas a key informant is selected on the basis of specialised knowledge, experience and local understanding. The key informant helps the researcher understand the local language, customs, kinship, genealogies, social relations and taboos from an insider's perspective. They may also help the researcher gain access to the community and establish relationships of trust. Nevertheless, their information is not regarded as the definitive truth about the entire community; the researcher cross-checks it against information from other informants, participant observation and documents. Therefore, the correct option is (b).
- 61. Explanation:** Malinowski drew a functional distinction between religion and magic. Magic is an instrumental activity whose aim is to achieve a specific practical outcome, safety or success. It is used particularly in situations where risk and uncertainty persist despite knowledge and technical skills. In contrast, the primary purpose of a religious ritual is not to bring about a specific subsequent material event. Its performance is in itself an expression of faith, tradition and community values. Religion also helps maintain courage, self-confidence and social unity during life crises. Therefore, the correct answer is (a).
- 62. Explanation:** The primary and most well-established application of forensic odontology is the identification of unidentified deceased persons. In this process, ante-mortem dental records – such as dental X-rays, fillings, crowns, root-canal treatment and missing teeth – are compared

with post-mortem dental findings. Teeth are generally more durable than other tissues. Therefore, they can be useful for identification in cases involving decomposition, fire or mass disasters, although they are not entirely indestructible. Age can also be estimated from dental structures. Bite marks can be documented, but the conclusive identification of an individual solely from their pattern is not regarded as scientifically established. Among the available options, (b) is the most appropriate.

- 63. Explanation:** Champaran Satyagraha was Gandhiji's first successful Satyagraha in India (statement 1 is correct). At the Lucknow Session (1916), Rajkumar Shukla, a peasant from Champaran, met Gandhiji and invited him to investigate the atrocities committed by indigo planters (statement 2 is correct). The Champaran Agrarian Enquiry Committee was constituted under the chairmanship of Ek.G. Sly to investigate the agrarian problem in Champaran. Mahatma Gandhi was also appointed as a member of this committee. On the recommendation of this enquiry committee, the Champaran Agrarian Act was passed, the Tinkathia system was abolished, and 25% of the amount illegally collected was refunded to the peasants (statement 3 is correct).
- 64. Explanation:** Birsa Munda led the Ulgulan rebellion in Chota Nagpur. The intense phase of this rebellion (Munda/Ulgulan) was 1899 AD – 1900 AD, and it was directed against the colonial land revenue system, dikus, land encroachment and Beth Begari. This movement was also associated with the restoration of the Khuntkatti (communal land rights) system. The Tana Bhagat Movement of 1914 was led by Jatra Bhagat in Chota Nagpur. The Khasi rebellion of 1829-33 was led in the hills of Assam by U Tirot Sing, the ruler of Nongkhlaw. The principal leaders of the Sannyasi-Fakir rebellion in Bengal in the late 18th century were Majnu Shah, Musa Shah and Bhavani Pathak. Therefore, option (a) is correct.
- 65. Explanation:** The Swaraj Party was formed in 1923 amid the political vacuum created by the withdrawal of

the Non-Cooperation Movement after the Chauri Chaura incident (Assertion A is correct). Following differences over the boycott of councils at the Gaya Session (1922), the 'Pro-changers' (C. R. Das and Motilal Nehru) held that colonial reforms could be thwarted from within by entering the legislative councils and obstructing government work (Reason R is correct). Thus, (R) provides the correct explanation of (A).

- 66. Explanation:** During his tenure as Viceroy (1899-1905 AD), Lord Curzon attempted to strengthen British rule in India while completely disregarding the aspirations of the Indian people. Gopal Krishna Gokhale compared Curzon's administration with that of the Mughal emperor Aurangzeb.
- 67. Explanation:** The original structure of the Great Stupa at Sanchi, located in Raisen (M.P.), was built of bricks by Ashoka (statement a). During the Shunga period, it was encased in stone and enlarged. During the reign of the Satavahana rulers, all four of its highly artistic and ornate toranas (Gates) were added (statement b). These toranas bear carvings of Jataka tales, Avadana tales and symbols of the Buddha associated with Buddhism (statement c). Thus, all the above statements are correct.
- 68. Explanation:** The Atharvaveda (other name: Atharvangirasa Veda) is very closely associated with the lives of ordinary people and the secular world (option b is correct). It contains a collection of mantras related to the treatment of diseases with herbs, medical science, architecture, marriage, agriculture, the subjugation of enemies, magic and witchcraft, and everyday conduct. A major section of it is the 'Bhumi Sukta', which expresses devotion to the environment and the motherland. Its chief priest was called 'Brahma'.
- 69. Explanation:** Among the books written on the Revolt of 1857, Sir Syed Ahmad Khan wrote the first book in an Indian language, 'Asbab-e-Baghawat-e-Hind' (1859). V.D. Savarkar described it as India's first war of independence in 'The Indian War of Independence, 1857'. R.C.

Majumdar wrote 'The Sepoy Mutiny and the Revolt of 1857', in which he regarded it as neither the first nor a national struggle. Asoka Mehta wrote the book 'The Great Rebellion'.

70. **Explanation:** According to Dalhousie's Doctrine of Lapse (policy of annexation), the rulers of dependent states did not have the right to adopt a son and declare him heir to the state without British permission (statement 1 is correct). Under this policy, Satara was the first to be annexed in 1848 (statement 2 is correct). Subsequently, Jaitpur, Sambalpur (1849), Baghat (1850), Udaipur (1852), Jhansi (1854) and Nagpur (1854) were annexed, causing widespread discontent among the princely states and laying the foundation for the Revolt of 1857. It is important to note here that Udaipur, annexed under Dalhousie's Doctrine of Lapse, was the small state of Udaipur under Surguja in Central India, not the princely state of Udaipur in Mewar.
71. **Explanation:** Raja Rammohan Roy founded the Brahmo Samaj in 1828 AD. Owing to ideological differences between Keshab Chandra Sen and Debendranath Tagore in 1865 AD, Keshab Chandra Sen formed a new association called the Brahmo Samaj of India in 1866 AD. Thereafter, Debendranath Tagore's Brahmo Samaj came to be known as the 'Adi Brahmo Samaj'.
72. **Explanation:** The Second Round Table Conference was held in London from 7 September 1931 to 1 December 1931. Following the Gandhi-Irwin Pact of 5 March 1931, Gandhiji participated in this conference as the sole representative of the Congress. Gandhiji reached London aboard the ship 'S.S. Rajputana' and stayed at 'Kingsley Hall' in London.
73. **Explanation:** To counter the racial discrimination faced by Indian traders and labourers in South Africa, Mahatma Gandhi laid the foundation of the 'Natal Indian Congress' in May 1894 (statements a and b). Alongside this, he started a newspaper called 'Indian Opinion' in 1903 and established 'Phoenix Farm' (1904) near Durban and 'Tolstoy Farm' (1910) in Johannesburg. Thus, all the options are correct.

74. **Explanation:** In September 1920, a special session of the Congress was held in Calcutta under the presidency of Lala Lajpat Rai. At this session, Mahatma Gandhi proposed launching the 'Non-Cooperation Movement' in protest over the Rowlatt Act, the Jallianwala Bagh massacre and the Khilafat issue, and the Congress accepted the proposal. Later, at the regular 'Nagpur Session' held in December 1920 (President: C. Vijayaraghavachariar), the non-cooperation resolution was fully ratified and historic changes were made to the party's constitution.

75. **Explanation:** The struggle of 1857 was concentrated mainly in northern and central India, but southern India was not entirely unaffected by it. Evidence of rebellious activities, secret meetings and limited military discontent was found in Hyderabad, Kolhapur, Madras, Salem and the coastal areas of Karnataka (option b is correct). However, owing to the different social composition of the Madras Army and the lack of support from major zamindars, it could not become as widespread as it did in northern India.

76. **Explanation:** One of the major features of the Quit India Movement (1942) was the establishment of 'parallel governments' in different parts of the country. The first parallel government was formed in Ballia, Uttar Pradesh, in August 1942 under the leadership of freedom fighter Chittu Pandey. It established short-lived control over the local administration and secured the release of prisoners from jail. For this reason, Ballia is also known as 'Baghi Ballia'.

77. **Explanation:** Under Article 72, the President's pardoning power is a constitutional executive power exercised on the advice of the Union Council of Ministers, not at the President's own discretion; therefore, statement 1 is false. In both death-penalty cases and court-martial (Court Martial) cases, the President has the power to grant a full pardon, commute or suspend a sentence; therefore, statement 2 is correct and statement 3 is false. The President's power is more

extensive than that of the Governor. The President's power extends to all court-martial cases and all death sentences, whereas the Governor's power is limited to offences falling within the scope of the state's executive power. The Governor does not have this power in court-martial cases; however, for an offence within the state's executive jurisdiction, the Governor can grant a pardon even in a death-penalty case.

78. **Explanation:** Article 112 mentions the Union's 'Annual Financial Statement' (budget). Under Article 115, a supplementary or additional grant is presented when additional funds are required during the financial year. Article 116 empowers Parliament to pass a vote on account (Vote on Account) for government expenditure until the budget is passed, and a vote of credit for emergencies. Article 117 provides for special procedures relating to the introduction of Financial Bills. Thus, the matching in option (a) is correct.

79. **Explanation:** Article 360 provides for a Financial Emergency, but a Financial Emergency has never been imposed in India to date (not even during the financial crisis of 1991); therefore, statement (b) is false. The emergency provisions are contained in Articles 352 to 360 of Part 18. Article 356 relates to the failure of constitutional machinery in a state, and under Article 352, a National Emergency can be imposed throughout the country or in a specific geographical part of it.

80. **Explanation:** The Fourth Schedule of the Constitution provides for the allocation of seats in the Rajya Sabha to the states and the Union Territories specified therein (such as Delhi, Puducherry and Jammu and Kashmir). This allocation is based on the population of the states. Schedules 5 and 6 describe the administration of Scheduled and Tribal Areas. Schedule 7 concerns the clear division of powers between the Centre and the states through three lists, while Schedule 2 gives details of the salaries and allowances of specified constitutional office-holders.

81. Explanation: According to Section 6 of the Protection of Human Rights Act, 1993, the Chairperson of the NHRC holds office for 3 years or until attaining the age of 70 years, whichever is earlier. An appointed member holds office for 3 years, and no member can remain in office after attaining the age of 70 years. Therefore, statement (b) is correct. NHRC is a statutory body constituted under the Protection of Human Rights Act, 1993. Article 324 relates to the Election Commission. NHRC cannot itself punish any person, but it can investigate human rights violations, exercise specified powers of a civil court during an inquiry, and recommend compensation, prosecution or other appropriate action. Its Chairperson may be a person who has held office as the Chief Justice of India or as a judge of the Supreme Court; therefore, this office is not restricted to a former Chief Justice of India alone.

82. Explanation: The Supreme Court has appellate jurisdiction over judgments of the High Courts under Articles 132 (constitutional matters), 133 (civil matters) and 134 (criminal matters); therefore, statements 1 and 2 are correct. Under Article 136, the Supreme Court may, at its discretion, grant special leave to appeal against any judgment, decree, determination, sentence or order of any court or tribunal. This power is not restricted to civil matters alone. Courts and tribunals constituted under laws relating to the armed forces are exceptions to this provision. Therefore, statement 3 is incorrect.

83. Explanation: Adjournment Motion – This is an extraordinary parliamentary device of the Lok Sabha. Through it, the normal business of the House is suspended to discuss a definite matter of recent occurrence and urgent public importance.

No-Confidence Motion – The Union Council of Ministers is collectively responsible to the Lok Sabha. Therefore, a no-confidence motion is moved only in the Lok Sabha and against the entire Council of Ministers. Its purpose is to determine whether the government enjoys majority support in the Lok Sabha. It is not necessary to state reasons for moving it.

Calling Attention Motion – Calling Attention is an Indian parliamentary innovation. Through it, a member, with the prior permission of the Speaker, draws a minister's attention to a matter of urgent public importance. The minister concerned makes a statement on the matter, and members may ask clarificatory questions. No voting takes place on it.

Censure Motion – Its purpose is to criticise a specific policy or action of the government, the entire Council of Ministers, a minister or a group of ministers. Unlike a no-confidence motion, a censure motion specifies the particular reasons or grounds for criticism.

84. Explanation: Article 13(3)(a) provides an inclusive definition of 'law'. It includes Acts of Parliament and State Legislatures, as well as ordinances, orders, bye-laws, rules, regulations, notifications, customs and usages having the force of law.

However, according to Articles 13(4) and 368(3), Article 13 does not apply to constitutional amendments made under Article 368. Therefore, statement (d) is false. However, a constitutional amendment may be challenged through judicial review on the independent ground of violating the basic structure.

85. Explanation: The Cabinet Secretariat functions directly under the charge of the Prime Minister and makes provision for the Cabinet and its committees. Its administrative head is the Cabinet Secretary of India, who is the ex officio head of the Civil Services Board. The allocation of departments among ministries and the appointment of ministers are carried out by the President on the advice of the Prime Minister, not by the Cabinet Secretariat (therefore, statement 3 is incorrect).

86. Explanation: Article 200 relates to the Governor's assent to Bills passed by the State Legislature. When a Bill is presented, the Governor may assent to it, reserve it for the consideration of the President or – if it is not a Money Bill – withhold assent and return it, along with a message, to the State Legislature for reconsideration. When it is passed again and presented, the Governor cannot withhold assent to it.

If, in the Governor's opinion, a Bill, upon becoming law, would reduce the powers of the High Court to such an extent as to endanger the position assigned to it by the Constitution, it must be reserved for the consideration of the President. Therefore, option (b) is correct.

87. Explanation: Zonal Councils are statutory bodies, not constitutional bodies, and were constituted through Parliament's 'States Reorganisation Act, 1956' (statement b is correct). The 'Union Home Minister' of India (not the Prime Minister) is the Chairman of all Zonal Councils. The Chief Ministers of the states concerned serve as Vice-Chairmen by rotation. These councils are only advisory and consultative bodies that deliberate on inter-state cooperation and socio-economic matters, and their decisions are not binding.

88. Explanation: Article 243-ZE provides for the Metropolitan Planning Committee. In every metropolitan area, this committee prepares a draft development plan for the area as a whole. According to Article 243-P(c), a metropolitan area is an area with a population of 10 lakh or more, situated in one or more districts, comprising two or more Municipalities, Panchayats or other contiguous areas, and specified by the Governor through a public notification. At least two-thirds of the committee's members are elected by and from among the elected members of the Municipalities and the Chairpersons of the Panchayats. Their election is in proportion to the populations of the Municipalities and Panchayats. Article 243-ZD relates to the District Planning Committee.

89. Explanation: In contemporary sociology, social change is studied objectively, without any personal bias. Therefore, Assertion (A) is true. Sociologists do not declare change to be 'positive' or 'negative' in advance; this is because the stability of a social system (such as the caste system) may be agreeable to one class, while the same system may also cause the exploitation of another class. Therefore, change is viewed only as a transformation of social structure. Thus, Reason (R) is also true and provides a correct and logical explanation of Assertion (A).

- 90. Explanation:** In Indian philosophy, human existence is understood in terms of five successive sheaths (koshas). The grossest layer is the 'Annamaya Kosha' (1), which is the body nourished by food. The second, 'Pranamaya Kosha' (2), channels breath and vital energy. The third, 'Manomaya Kosha' (3), controls volition, doubt and emotions. The fourth, 'Vijnanamaya Kosha' (4), is associated with higher intellectual capacity, reasoning and decision-making ability. And the subtlest layer, 'Anandamaya Kosha' (5), enables the experience of the supreme bliss of the soul. Therefore, code (a) is correct.
- 91. Explanation:** Realistic conflict theory, propounded by Muzafer Sherif, explains that when two or more groups engage in actual competition for limited resources (such as jobs, land or power), intergroup prejudice, stereotyping and hostility intensify (statements 1 and 2 are true). The 'Robbers Cave Experiment' demonstrated this by generating prejudice through competition for resources in a boys' camp. This theory does not regard any genetic or innate biological cause as the basis of conflict. Therefore, statement 3 is false.
- 92. Explanation:** Max Weber regarded 'rationality', rational rules and the expansion of bureaucracy as the main features of modern society. Émile Durkheim, on the other hand, showed in his book 'The Division of Labour in Society' that the division of labour and specialisation produce 'organic solidarity' in modern industrial society, but under conditions of rapid social change, the breakdown of social norms gives rise to a state of 'anomie or immorality'. Therefore, option (b) is correct.
- 93. Explanation:** The female health worker (ANM) is the backbone of maternal and child health at the sub-centre level. Her main duties include registering pregnant women, conducting at least 4 antenatal check-ups (ANC), administering tetanus vaccination and iron-folic acid, identifying and referring high-risk pregnancies, immunisation and family planning counselling.
- However, performing surgery (such as sterilisation operations or major surgery) is the role of a doctor, not an ANM. Therefore, option (b) does not fall within her responsibilities.
- 94. Explanation:** 'Counselling' is derived from the Latin word 'Consulere', which means "to consult, seek advice or deliberate". In modern psychology, counselling is not merely the provision of informal free advice or the giving of orders. It is a purposeful, scientific and interactive process between a qualified, trained counsellor and an individual experiencing problems, through which the client is enabled to understand their problems, explore alternatives and make independent decisions.
- 95. Explanation:** 'Need for affiliation' is a fundamental sociobiological tendency found in human beings. Stanley Schachter's studies demonstrated that when an individual is in a situation of extreme stress or crisis, their desire to be with others facing a similar situation intensifies. When an individual is ostracised from society, their fear of losing connectedness and control increases, making them even more sensitive to social cues.
- 96. Explanation:** Health is a multi-dimensional concept that includes physical, mental, emotional, social, spiritual and occupational dimensions. 'Occupational Health' is directly related to how satisfied an individual is with their work/employment, whether their working conditions are safe, and whether their work is compatible with their life goals. Therefore, the statement in option (b) that it is unrelated to job satisfaction is false.
- 97. Explanation:** Both pairs are entirely correct. Albert Bandura (1977) showed that individuals not only learn through direct rewards but also acquire attitudes by observing the behaviour of their role models in society (pair 1 is correct). Leon Festinger (1954), in his 'Social Comparison Theory', explained that when objective standards are unavailable on a matter, individuals compare themselves with people in their 'reference group' to evaluate their opinions and abilities (pair 2 is correct).
- 98. Explanation:** Effective communication is not merely the selection of the right words. During a conversation, the tone of the speaker's voice and their body language can profoundly influence the meaning of the message. Words with double meanings should be avoided. Furthermore, if the information transmitted is useful to the recipient, their interest is sustained; whereas unnecessary information obscures the core message. Prior consultation with stakeholders brings clarity and acceptability to the message.
- 99. Explanation:** The mass media are the largest platform for persuasion. Within this platform, advertisements generate product sales and shape brand image; corporate PR builds an organisation's reputation; and newspaper editorials, opinion columns and political campaign publicity use various techniques of persuasion to influence the attitudes, beliefs and voting behaviour of the general public. Therefore, option (b) represents this correctly.
- 100. Explanation:** In sociology, social change does not refer to a minor fashion trend or a superficial change. Social change is a broad phenomenon that refers to a long-term and significant transformation in social structure, social institutions (such as the family and marriage), patterns of social relationships, cultural values, symbols and the functions of society. It includes changes in both material culture (technology) and non-material culture (ideas and beliefs).
- 101. Explanation:** Assertion (A) is correct. Health education is not merely a process of providing information about diseases. Its purpose is to develop appropriate knowledge, a positive attitude, essential skills and the ability to make healthy decisions in the individual and the community, so that healthy behaviour is adopted and sustained over the long term. Reason (R) is also correct. Health-related information is necessary, but it alone is not sufficient to change behaviour. An individual's health behaviour is influenced by their risk perception, perception of disease severity, expected benefits, perceived barriers, self-efficacy, fear, family influence, social norms and available facilities.

For this reason, health education uses counselling, skill development, social support and behaviour-change measures rather than merely presenting facts. Therefore, Reason (R) is the correct explanation of Assertion (A).

- 102. Explanation:** The sequence of events in the institutional development of modern psychology in India is as follows: Prof. Girindrasekhar Bose, a disciple of Sigmund Freud, established the 'Indian Psychoanalytical Society' in 1922 (1). Subsequently, the 'Indian Psychological Association' was formed in 1924 to organise researchers from across the country (2). Later, in 1938, a separate branch of 'Applied Psychology' was opened in the Department of Psychology at the University of Calcutta (3). Therefore, the correct chronological order is 1, 2, 3.
- 103. Explanation:** J. P. Guilford presented a three-dimensional (3D) structure-of-intellect model to explain the complexity of intelligence. Its three main dimensions are: (1) Operations – such as cognition, memory recording, memory retention, divergent production, convergent production and evaluation; (2) Contents – visual, auditory, symbolic and behavioural material; and (3) Products – units, classes, relations and transformations. By combining these three dimensions, Guilford initially identified 120 and ultimately 180 intellectual abilities/cells. The theory of 'general (G) and specific (S) factors' was proposed by Charles Spearman, not Guilford.
- 104. Explanation:** Sternberg's theory identifies three types of intelligence: analytical (reasoning and problem-solving), creative (dealing with novelty) and practical (Street Smartness/Practical). Coping with the real challenges of everyday life and making practical choices of nutritious food within a limited budget or under adverse circumstances constitute the best example of 'practical intelligence' (Practical Intelligence). This intelligence gives an individual the ability to adapt effectively to and transform their environment. Thus, option (b) is the correct answer.

105. Explanation: In psychological testing, 'reliability' (Reliability) means that if a test is administered repeatedly to the same group under the same conditions, the results obtained should be stable and consistent. In contrast, 'validity' means that the test actually measures accurately the specific trait or ability (such as intelligence or stress) for which it was designed. If an intelligence test begins to measure mathematical ability, it will not be considered valid. Thus, option (b) presents the correct distinction.

106. Explanation: Human development is neither the result of heredity alone nor of the environment alone. Heredity provides an individual with biological potentialities, tendencies and certain limitations. The environment—such as nutrition, family, education, health and socio-cultural opportunities— influences the expression and development of these potentialities. Therefore, an individual's development is the integrated outcome of the continuous and complex interaction between the two. "Inseparability" means that it is inappropriate to completely separate their contributions to an individual's development and assign fixed percentages to them.

107. Explanation: 'Encoding failure' occurs when, owing to an individual's carelessness or lack of attention, information in short-term memory is not converted into a form suitable for long-term memory (that is, the information was never registered in the brain). In contrast, 'retrieval failure' occurs when information is securely stored in long-term memory, but the individual cannot recall it at the required moment because the appropriate 'retrieval cues' (Retrieval Cues) are unavailable (such as the 'tip-of-the-tongue' phenomenon). Thus, option (a) is true.

108. Explanation: Language is a system of socially accepted symbols and the rules governing their organisation, used to communicate thoughts, feelings, intentions and information. It is not limited to spoken words but can be expressed through spoken, written and signed forms. Sign language is a complete

language with its own grammatical structure. Ordinary gestures, facial expressions and body posture are means of non-verbal communication, but they can also perform linguistic functions within a rule-governed sign language. Thus, among the given options, (b) is the most appropriate.

109. Explanation: In Pavlov's classical conditioning, the organism remains passive and learns an association between two stimuli (CS and UCS), and involuntary physiological responses (such as salivation) occur. In Skinner's operant conditioning, the organism actively engages with the environment and performs voluntary behaviour (such as pressing a lever), and the consequence/reinforcement received after the behaviour determines the rate of that behaviour. The principles governing voluntary and involuntary responses have been reversed in statement 3, so statement 3 is false.

110. Explanation: The fundamental philosophy of the Juvenile Justice Act (JJ Act) is 'reformatory and welfare-oriented' rather than punitive. It regards juvenile delinquency as a product of social, familial, economic and psychological circumstances. Therefore, rather than sending children in conflict with law and children in need of care and protection to prison or imposing harsh punishments, it emphasises their rehabilitation (Rehabilitation) into mainstream society through Child Welfare Committees (CWCs), children's homes, counselling, education and skill development. Thus, option (b) is the false statement.

111. Explanation: Pavlov's conditioning experiments established that if the Conditioned Stimulus (CS – such as a bell or light) stands out clearly from the surrounding noise or background and is 'distinctive', attention is immediately focused on it. Furthermore, the more pronounced the 'intensity' of the conditioned stimulus, the more rapidly and in fewer trials the organism acquires the conditioned response (CR).

- 112. Explanation:** Depression is a serious mental disorder distinct from ordinary momentary sadness. It involves prolonged struggles with extreme hopelessness, emptiness, persistent sadness, loss of interest in daily activities and pursuits, changes in sleep and appetite, extreme fatigue, lack of concentration and suicidal thoughts. It severely disrupts the individual's family, personal and professional life. Thus, option (b) is true.
- 113. Explanation:** The Applied Nutrition Programme was regarded as one of the best-conceived nutrition programmes at the conceptual level—although it could not achieve the expected results—because it prioritised local self-reliance rather than confining itself solely to free food distribution. Thus, Assertion (A) is true. Under this programme, villagers were encouraged to undertake local activities such as developing kitchen gardens and practising horticulture and adopting poultry farming and fish farming, so that the local availability and consumption of nutritious foods such as eggs, fish, fruits and vegetables could increase. Community and individual self-help formed the principal basis of its practical design, although public participation and management remained weak during implementation. Thus, Reason (R) is also true and correctly explains the conceptual superiority stated in Assertion (A).
- 114. Explanation:** Kimberlé Crenshaw (A) propounded the concept of intersectionality, which explains that social positions such as gender, race, caste and class, and the power relations associated with them, can combine to produce distinctive forms of discrimination and health inequalities (1). The culture-centred PEN-3 health model, which is used in diverse global communities, including African communities (B), was developed by Dr. Airhihenbuwa and places culture at the centre of health behaviour (2). American anthropologist Robert Redfield (C) analysed Indian and traditional villages as 'little communities' (3). The functionalist sociologist Talcott Parsons (D), on the other hand, developed the concept of the 'sick role' (4). Thus, code (a) is correct.
- 115. Explanation:** Parsons presented the sick role in terms of four institutional expectations, generally described as two rights and two duties. The rights include: (1) receiving socially sanctioned, conditional and generally temporary exemption from daily social/office responsibilities during illness, according to the nature and severity of the illness (statement 1 is true); and (2) being free from moral blame for becoming ill (statement 2 is true). In return, society imposes two duties on the sick person: (1) to regard illness as undesirable and to desire and make efforts to recover; and (2) to seek technically competent medical assistance and cooperate in the treatment process (statement 3 is true). Thus, all three statements are true.
- 116. Explanation:** The concentration index is an established statistical tool for measuring health inequality. For the standard concentration index, -1 and +1 are the theoretical extremes; for binary health variables, the practical bounds of the conventional index may depend on the mean. When its value is 'zero', it generally indicates the absence of concentration related to socio-economic status; a zero value alone does not establish complete equality in every situation. If the index has a 'negative' value, it clearly means that adverse health outcomes, such as child mortality rates, malnutrition or infectious disease, are more concentrated among the poor and socio-economically disadvantaged sections of society. With ranking from poor to rich, a positive value indicates concentration of the indicator among the affluent sections.
- 117. Explanation:** Unscientific dumpsites or inadequately managed landfills give rise to a dual environmental and health crisis. First, anaerobic decomposition of waste produces 'methane' gas, which is a potent greenhouse gas and may increase the risk of fire or explosion when it accumulates and an ignition source is present. Second, when rainwater or other water percolates through waste, a contaminated liquid containing dissolved and suspended pollutants, called 'leachate', is formed. This leachate can seep into and mix with soil and groundwater and, in the absence of collection and treatment, contaminate the soil and groundwater; the pollutants it contains depend on the composition of the waste and may include certain heavy metals.
- 118. Explanation:** In the transtheoretical model developed by Prochaska and DiClemente, behaviour change is commonly explained through five main stages, but this process is not strictly linear: (1) precontemplation; (2) contemplation; (3) preparation – in which the individual has a clear intention to take action within the next 30 days and has generally already taken some initial steps, such as joining a gym or setting a date to quit substance use; (4) action – in which observable change begins; and (5) maintenance. Thus, option (b) is correct.
- 119. Explanation:** Tears contain numerous antimicrobial components, including lysozyme, to protect human eyes against external infections; among these, lysozyme is a major antibacterial enzyme. Lysozyme weakens bacterial cell walls by hydrolysing the peptidoglycan present in them and contributes to natural defence against infections such as bacterial conjunctivitis. Keratin is a structural protein of the skin, hair and nails; sebum is the oily secretion of the sebaceous glands; melatonin is a hormone associated with the regulation of the sleep-wake cycle.
- 120. Explanation:** Crenshaw's 'intersectionality' clarifies that social discrimination cannot be examined in isolation on the basis of just one identity (such as gender alone or caste alone). In public health, social structures and power structures associated with gender, caste and class can interact to produce a distinctive form of deprivation for a poor Scheduled Caste woman. This multidimensional situation can adversely affect her access to health services, treatment experiences, service quality and health outcomes.

- 121. Explanation:** Anthropologist Robert Redfield, in his book 'The Little Community', identified four main characteristics of the 'little community', taking a holistic view of small human communities and drawing particularly on village studies:
- 1. Distinctiveness** – clearly defined community boundaries and a distinct collective identity;
 - 2. Smallness** – being sufficiently small for the community to be directly observed as a whole;
 - 3. Homogeneity** – relative similarity in ways of life, activities and outlook, and a slow pace of change; and
 - 4. Self-sufficiency** – most of the members' activities taking place and most of their needs being met within the community. Thus, option (a) is correct.
- 122. Explanation:** Selection bias arises when the selection, recruitment, participation or retention of participants in a study differs systematically in such a way that the study sample differs from the source population in important characteristics and the study estimate is distorted. For example, if only educated and affluent patients come forward for research on HIV or cancer, while less educated, economically disadvantaged patients or those with limited access to health services are left out because of fear or poverty, and if this participation is related to disease or risk status, estimates of disease frequency or the risk–outcome relationship may be distorted and the wider applicability of the findings may be limited. This can produce systematic error in the study estimates and conclusions. In addition to initial recruitment, selection bias can also arise from non-response and selective loss to follow-up.
- 123. Explanation:** In the Health Belief Model, 'perceived barriers' refer to the psychological, physical or economic obstacles that prevent an individual from following a doctor's advice or taking preventive measures (such as mammography or de-addiction). These may include the excessive cost of treatment, the hospital being far away, loss of income or wages due to taking time off work, pain associated with the procedure, or social embarrassment or stigma. If the individual feels that the 'perceived barriers' outweigh the 'perceived benefits' they would receive, the likelihood of adopting that health behaviour decreases.
- 124. Explanation:** The interactionist perspective in microsociology does not confine illness to a biomedical fact alone but also seeks to understand the patient's social experience. Its analysis of 'lived experience' examines how a chronic or serious illness can affect or transform an individual's everyday family life, job, self-esteem and social identity. This perspective examines how patients make sense of their changing physical condition and social responses, and how they reconstruct or manage their 'self' and social identity.
- 125. Explanation:** In India's public health system, the primary healthcare system is the lowest and foundational level of the three-tier public health framework. It includes primary-level facilities within the three-tier system, such as sub-health centres, primary health centres, urban primary health centres and the converted Ayushman Arogya Mandirs (Health and Wellness Centres). These centres provide immunisation, maternal and child health services and basic treatment through frontline workers (ASHAs, ANMs and Anganwadi workers). In contrast, regional cancer institutes and advanced cardiac surgery centres fall under 'tertiary healthcare', which provides specialised and complex treatment.
- 126. Explanation:** According to the evaluation of India's tuberculosis elimination programmes, new TB cases declined by approximately 21 per cent between 2015 and 2024, reflecting progress in comprehensive TB control efforts, including early diagnosis, treatment coverage, decentralised services and community participation. In addition, a reduction of approximately 28 per cent in the TB mortality rate was also recorded during this period. The screening of more than 20 crore at-risk individuals and the successful diagnosis of approximately 28 lakh patients under the 'TB Mukta Bharat Abhiyaan' have been the main basis of this progress. Therefore, both statements are correct.
- 127. Explanation:** During a seismic disaster, collapsing buildings and debris have direct and immediate mechanical effects on the body. These result in death at the scene, fractures, head injuries, severe bleeding and 'crush syndrome' due to muscle compression. In crush syndrome, myoglobin released by the breakdown of muscle tissue causes kidney failure (renal failure). In contrast, waterborne diseases, starvation or malnutrition are medium- to long-term effects following a disaster, rather than immediate effects.
- 128. Explanation:** Contaminated water and unsafe sanitation systems serve as the main vehicles for pathogens transmitted through the faecal-oral route. When drinking water or food is contaminated by human faeces, bacteria or viruses, intestinal and liver diseases such as diarrhoea, cholera, typhoid, and hepatitis A and E spread. Among the other options, (b) includes vector-borne diseases transmitted by mosquitoes, (c) includes genetic disorders, and (d) includes airborne or occupational diseases associated with the respiratory system.
- 129. Explanation:** A robust and integrated disease surveillance system (such as the IHIP programme operated under IDSP in India) identifies disease patterns in a community, clusters of unusual cases and early trends of potential epidemics in real time. This enables the health administration to respond rapidly, allocate resources and implement control measures (such as vaccination, sanitisation) in a timely manner. The objective of surveillance is to undertake prompt preventive action alongside data collection, rather than merely maintaining records or treating all regions as identical.

- 130. Explanation:** Following the devastating earthquake of 1993, the 'Disaster Management Training Institute' was established in Latur (Maharashtra), India, to enhance administrative preparedness, disaster risk reduction and medical response capacity. This institute provides specialised practical training to administrative officers, health personnel, first responders and civil defence groups in search and rescue, first aid, trauma management and the preparation of emergency plans. Subsequently, this campus was handed over to the CRPF, and the Recruit Training Centre, Latur, was established there.
- 131. Explanation:** Non-communicable diseases (NCDs) are chronic diseases that are not transmitted from one person to another. According to WHO, the 4 major NCD groups responsible for global mortality are: 1. Cardiovascular diseases, 2. Cancer, 3. Chronic respiratory diseases (such as COPD, asthma), and 4. Diabetes. These mainly arise from shared risk factors such as an unhealthy lifestyle, tobacco, alcohol, an unhealthy diet, physical inactivity and air pollution.
- 132. Explanation:** The health geography of Uttar Pradesh is highly diverse. The Terai and the Terai region of Purvanchal are vulnerable to mosquito-borne (JE/AES, dengue) and waterborne infections because of moisture, flooding and waterlogging. The semi-arid plateau region of Bundelkhand is affected by malnutrition and summer-related risks due to drought, water scarcity and poverty. Meanwhile, the urban-industrial belt of western Uttar Pradesh and the NCR faces a high risk of air pollution, respiratory diseases and non-communicable (lifestyle) diseases. Therefore, option (a) is the correct match.
- 133. Explanation:** Antimicrobial resistance (AMR) develops when microorganisms (bacteria, fungi) become resistant to the effects of medicines. Its main causes include taking unnecessary medicines for viral infections (against which antibiotics do not work), discontinuing a course of medication before completion (allowing the surviving bacteria to develop resistance), and the misuse of antimicrobials to promote growth in animal husbandry. This is a major crisis for modern medicine, rendering even common infections untreatable.
- 134. Explanation:** Typhoid is an infectious waterborne disease caused by the entry of the bacterium 'Salmonella Typhi' into the digestive system through contaminated water or food. It has no connection with X-linked genetic inheritance (diseases such as haemophilia or colour blindness are chromosomal). All the other options are correct: hepatitis B is transmitted through blood/bodily fluids, dengue through the Aedes mosquito, and rabies through the bite/saliva of a rabies-infected animal.
- 135. Explanation:** The intergenerational cycle of malnutrition refers to a situation in which undernutrition is continuously passed from one generation to the next. When a malnourished and anaemic adolescent girl becomes pregnant, she becomes a malnourished pregnant woman. As a result, a child is born with 'low birth weight' or prematurely. The child suffers from stunting and wasting during childhood and, if the child is a girl, repeats the same cycle in adolescence.
- 136. Explanation:** According to data from the World Health Organization (WHO), approximately 4.08 crore people worldwide were living with HIV (Human Immunodeficiency Virus) by the end of 2024. In terms of its geographical distribution, a large proportion (approximately two-thirds of the cases) is concentrated in the WHO African Region (particularly sub-Saharan Africa). This imbalance highlights socioeconomic inequality, health infrastructure, and inter-regional differences in the availability of prevention and treatment services. It is not airborne but is transmitted through bodily fluids.
- 137. Explanation:** Health geography studies how the physical, built and social environments influence human health and the distribution of diseases. When we examine the combined effect of environmental factors such as the availability of safe drinking water, adequate housing with ventilation, sewage disposal and solid waste management on human disease rates, this provides an ideal example of human-environment interaction. Laboratory testing or genetic studies alone do not fall within the spatial and environmental scope of health geography.
- 138. Explanation:** Drought is not merely a seasonal or agricultural crisis, but creates a multidimensional public health emergency. The drying up of water sources causes a severe shortage of drinking water, forcing people to drink unsafe/contaminated water and leading to an increase in waterborne diseases. The lack of water for sanitation leads to the spread of skin and intestinal infections. Crop failure increases food insecurity, poverty and malnutrition (especially among women and children). Thus, drought seriously affects health indicators both directly and indirectly. Therefore, option (b) is correct.
- 139. Explanation:** The causes of unemployment in India include slow economic growth, growth in the labour force exceeding job creation in the absence of adequate employment opportunities, inappropriate technology, a faulty education system, a lack of infrastructure and a lack of employability. If education and skills fully match labour market demand, infrastructure is adequate and productive employment opportunities are plentiful, these would be factors that reduce unemployment. India's challenge is not only to increase the number of jobs but also to align workers' skills with the available jobs and create productive, high-quality employment.
- 140. Explanation:** Under the income method, the incomes received by the factors of production are added together. These include compensation

of employees, rent, interest, profits and mixed income of the self-employed. To move from domestic income to national income, net factor income from abroad is also added. Pensions and scholarships are not payments in return for current productive services; they are transfer incomes. Therefore, including them in the income method would overstate the actual factor income generated through production.

141. Explanation: Human development is a broader concept than economic growth. Its objective is not merely to increase gross domestic product or income, but to expand people's capabilities and choices. A long and healthy life, education, knowledge, a decent standard of living and creative opportunities for individuals form the basis of human development. According to this approach, a nation's real wealth is its people. Economic growth is meaningful only when its benefits reach people in the form of improvements in health, education, living standards and equal opportunities. Therefore, option (c) expresses the full spirit of human development.

142. Explanation: The causes of poverty include the vicious circle of poverty, unequal distribution of income and wealth, a lack of productive employment, low agricultural productivity, social exclusion, a lack of access to social services, and multidimensional deprivations in health, education and living standards. If income distribution is relatively equal and everyone has equal access to opportunities, this would not be a cause of poverty but a condition that reduces inequality and deprivation. Poverty often persists because of the interplay of low income, low savings, low investment, low productivity and limited opportunities.

143. Explanation: Under the expenditure method, total final expenditure on final goods and services is added together. Its main components are private final consumption expenditure, government final consumption expenditure, investment expenditure and net exports. Symbolically, it is written as C

+ I + G + X – M, where C is private consumption, I is investment, G is government expenditure, X is exports and M is imports. Wages, rent, interest and profits are components of the income method, whereas value added is calculated by subtracting intermediate consumption from the value of output.

144. Explanation: Ragnar Nurkse's statement reflects the self-perpetuating nature of poverty. Low income leads to low savings, low savings lead to low investment, and low investment keeps productive capacity and income low. As a result, the country remains trapped in the same state of poverty. This is the vicious circle of poverty. This concept shows that poverty is sustained not only by an immediate shortage of income but also by weaknesses in capital formation and productivity. Therefore, coordinated interventions in investment, human capital and employment are necessary to break the vicious circle.

145. Explanation: The line of perfect equality represents a hypothetical situation in which each section of the population receives a share of income equal to its share of the population. If the actual Lorenz curve is close to this line, the distribution is relatively equal. If it bends further away from the line, a large share of income is concentrated among a relatively small section of the population and inequality increases. Therefore, a widening gap between the Lorenz curve and the line of perfect equality indicates increasing inequality in income distribution. The concept of the Gini coefficient is also understood on the basis of this geometric interpretation of the Lorenz curve.

146. Explanation: The education dimension is based on two indicators. The first is mean years of schooling for people aged 25 years or above. The second is the potential or expected years of schooling that a child of school-entry age will receive in the future. The first indicator reflects the existing educational attainment of the adult population, and the second reflects the educational opportunities of future generations.

Before 2010, the adult literacy rate and the gross enrolment ratio were used. The current methodology measures the duration of education and potential access more directly.

147. Explanation: Statement 1 is correct, because the 2023 progress review compared 24.85 per cent in 2015-16 with 14.96 per cent in 2019-21. Statement 2 is also correct, because the January 2024 discussion paper estimated that the multidimensional poverty ratio had declined from an estimated 29.17 per cent in 2013-14 to an estimated 11.28 per cent in 2022-23. Statement 3 is incorrect; both conclude that the multidimensional poverty ratio declined.

148. Explanation: The new base year for the Index of Industrial Production has been set at 2022-23 and that for the Consumer Price Index at 2024. The base year for the new gross domestic product series is 2022-23, whereas it was previously 2011-12. The new base year for the Consumer Price Index is 2024, whereas it was previously 2012.

149. Explanation: In the human development classification, countries with values ranging from 0.550 to 0.699 are placed in the medium human development category. India's Human Development Index value for 2023 is 0.685, so India falls within the medium human development category. This value is 0.015 below the minimum threshold of 0.700 for the high human development category, so the classification will remain medium human development.

150. Explanation: Unemployment reduces the income of individuals and families, which can affect both consumption and savings. When savings decline, the capacity for investment and capital formation may also weaken, so statement 2 is incorrect. Prolonged unemployment can lead to skill erosion, despair and a decline in young people's morale. Widespread unemployment can also increase social tension and instability. Therefore, statements 1 and 3 are correct. The impact of unemployment extends beyond the individual level to the overall economy and society.

Health Education Officer Screening Examination 2026

(General Studies and Social Sciences Related Knowledge)

Test-10

Answer key

1. (b)	2. (c)	3. (d)	4. (b)	5. (c)	6. (d)	7. (a)	8. (d)	9. (d)	10. (b)
11. (b)	12. (d)	13. (b)	14. (a)	15. (b)	16. (c)	17. (b)	18. (c)	19. (c)	20. (a)
21. (c)	22. (b)	23. (b)	24. (d)	25. (d)	26. (b)	27. (d)	28. (b)	29. (a)	30. (a)
31. (b)	32. (d)	33. (a)	34. (b)	35. (b)	36. (d)	37. (a)	38. (d)	39. (d)	40. (a)
41. (a)	42. (a)	43. (a)	44. (a)	45. (b)	46. (c)	47. (d)	48. (d)	49. (c)	50. (b)
51. (a)	52. (a)	53. (a)	54. (a)	55. (b)	56. (c)	57. (b)	58. (a)	59. (b)	60. (b)
61. (b)	62. (c)	63. (a)	64. (a)	65. (a)	66. (a)	67. (a)	68. (b)	69. (b)	70. (b)
71. (d)	72. (c)	73. (b)	74. (b)	75. (a)	76. (a)	77. (a)	78. (d)	79. (b)	80. (b)
81. (d)	82. (b)	83. (b)	84. (a)	85. (b)	86. (b)	87. (a)	88. (a)	89. (a)	90. (b)
91. (b)	92. (a)	93. (b)	94. (b)	95. (a)	96. (a)	97. (a)	98. (d)	99. (a)	100. (c)
101. (a)	102. (c)	103. (d)	104. (b)	105. (a)	106. (a)	107. (d)	108. (b)	109. (a)	110. (a)
111. (a)	112. (a)	113. (b)	114. (d)	115. (c)	116. (b)	117. (a)	118. (d)	119. (c)	120. (b)
121. (a)	122. (c)	123. (d)	124. (c)	125. (b)	126. (b)	127. (c)	128. (b)	129. (a)	130. (b)
131. (b)	132. (b)	133. (c)	134. (a)	135. (d)	136. (b)	137. (b)	138. (a)	139. (b)	140. (d)
141. (b)	142. (a)	143. (d)	144. (c)	145. (b)	146. (c)	147. (b)	148. (c)	149. (b)	150. (d)

Explanation

1. **Explanation:** Under Article 61, the President can be removed only on the ground of violation of the Constitution. The charge may be brought in either House of Parliament. Written notice must be given at least 14 days before moving the resolution, and it must bear the signatures of at least one-fourth of the total members of that House. The resolution must be passed by a majority of at least two-thirds of the total membership of the House. Nominated members of Parliament participate in impeachment, but state legislators do not.
2. **Explanation:** The Tenth Schedule deals with disqualification on the ground of defection. It was added by the 52nd Constitution Amendment Act, 1985 and came into force on 1 March 1985. Its objective was to curb the tendency towards defection in political parties. Subsequently, paragraph 3 of the Tenth Schedule was deleted by the 91st Constitutional Amendment, 2003. Thus, the Tenth Schedule provides the constitutional basis for the anti-defection framework in the Indian political system.
3. **Explanation:** Article 20 provides three important protections in respect of conviction for offences. First, no person can be convicted of an act that was not an offence under the law at the time it was committed. Second, no person shall be prosecuted and punished more than once for the same offence. Third, no accused person shall be compelled to testify against themselves. Free and compulsory education is related to Article 21A.
4. **Explanation:** Political parties are recognised on the basis of criteria prescribed by the Election Commission of India. There are several alternative conditions for becoming a state party. One of these conditions is that a party must secure at least 8 per cent of the total valid votes in the state in a Lok Sabha or Legislative Assembly election. Other conditions include securing 6 per cent of the votes and 2 seats in a Legislative Assembly election, 6 per cent of the votes and 1 seat in a Lok Sabha election, or winning 3 per cent of the total seats in the Legislative Assembly or a minimum of 3 seats.
5. **Explanation:** Supremacy of the Constitution means that the Constitution is the highest and supreme law of the country. The government, Parliament, the judiciary, the executive and citizens are all subject to the Constitution. No institution or individual is above the Constitution. Parliament can make laws, but it cannot make laws contrary to the Constitution. If a law conflicts with Fundamental Rights or constitutional provisions, the judiciary can declare it unconstitutional. This is the system of judicial review.
6. **Explanation:** Plants require seventeen essential elements to complete their life cycle normally, remain free from disorders and develop adequately. The material states that nine of these elements are required in large quantities and are called major nutrients or macronutrients. The remaining eight elements are required in small quantities and are called micronutrients or minor nutrients. Thus, all three statements are correct.
7. **Explanation:** White phosphorus consists of a tetrahedral structure of four phosphorus atoms. It is highly reactive and ignites spontaneously on contact with air, so it is stored under water. Red phosphorus is more stable and less reactive than white phosphorus. Sulphur is used in the manufacture of sulphur dioxide and sulphuric acid. The process of heating natural rubber with sulphur to increase its elasticity is called vulcanisation. Thus, option (a) is correct.
8. **Explanation:** Deoxyribonucleic acid is the genetic material in cells and controls genetic activities. It was discovered by Friedrich Miescher in 1869 AD, and he named it nuclein. Deoxyribonucleic acid molecules contain the five-carbon sugar deoxyribose. It contains nitrogenous bases called adenine, guanine, thymine and cytosine. Genes are also made of deoxyribonucleic acid. Thus, all three statements are correct.
9. **Explanation:** Diabetes is a hormonal or endocrine disease as well as a metabolic disease, associated with elevated blood-glucose levels. In this condition, the body cannot produce enough insulin or cannot use insulin properly. The major names associated with the discovery of/experiments on insulin are Frederick Banting, Charles Best and John Macleod. James Collip played an important role in purifying insulin for human use. The Nobel Prize for 1923 was awarded to Banting and Macleod.
10. **Explanation:** The causative agent of rabies is the rabies virus, a virus of the genus *Lyssavirus* in the family *Rhabdoviridae*. It can spread through the saliva of infected mammals, such as dogs, cats, monkeys, bats or foxes, through bites, scratches or saliva coming into contact with broken skin/mucous membranes. The virus reaches the central nervous system through the nervous system. In the event of a bite or scratch from a potentially rabid animal, the wound should immediately be washed with soap and running water. Therefore, option (b) is correct.
11. **Explanation:** Plants require micronutrients in very small quantities. The study material clearly states that their concentration is usually less than 1 ppm. Although their quantities are extremely small, they are nevertheless essential for plant growth and development. Boron, chlorine, copper, iron, manganese, molybdenum, nickel and zinc fall into this category. Thus, option (b) is correct.
12. **Explanation:** Henry Moseley studied the characteristic X-ray spectra of elements in 1913 AD and established that atomic number is a more fundamental basis of classification. According to the modern periodic law, the physical and chemical properties

of elements are periodic functions of their atomic numbers. According to IUPAC, the modern periodic table has groups numbered from 1 to 18 and 7 horizontal periods. The seventh period is described as a complete period containing 32 elements. Thus, all three statements are correct.

13. **Explanation:** The Lakshadweep archipelago is located in the Arabian Sea and is a group of 36 islands. Andrott is the largest island of Lakshadweep. Sri Vijaya Puram (former name: Port Blair) is the capital of the Andaman and Nicobar Islands. Saddle Peak is also associated with the Andaman and Nicobar Islands. Thus, in the context of Lakshadweep, the correct statement is option (b).
14. **Explanation:** The Tehri Dam Project is located in the confluence area of the Bhagirathi and Bhilangna rivers in Uttarakhand. With a height of 260.5 metres, it is described as India's tallest dam. The Sutlej and the Beas are associated with the Harike Barrage and the Indira Gandhi Canal Project. The Krishna and the Tungabhadra are associated with an important river system of South India. Thus, option (a) is correct for the Tehri Dam Project.
15. **Explanation:** The Earth rotates on its axis from west to east. This rotational motion causes day and night. The circle that divides day and night on the globe is called the circle of illumination, which is not stationary but keeps changing with the Earth's motion. Seasonal changes are related to the Earth's revolution and axial tilt. Thus, the principal result of rotation is given in option (b).
16. **Explanation:** India shares its longest land boundary with Bangladesh, with a stated length of 4096.70 kilometres. The Indian states of West Bengal, Assam, Meghalaya, Tripura and Mizoram share a boundary with Bangladesh. The boundary with China is stated to be 3488 kilometres long and that with Pakistan 3323 kilometres. Thus, India's longest international land boundary is with Bangladesh, and the correct answer is option (c).

17. **Explanation:** The study material states that the continuous creation theory (steady-state theory) was proposed by Fred Hoyle, Hermann Bondi and Thomas Gold. According to this theory, the universe has neither a beginning nor an end; matter is continuously created in it. In contrast, the Big Bang theory links the origin of the universe to an extremely dense and hot state. Therefore, option (b) is correct regarding the propounders of the steady-state theory.
18. **Explanation:** The Outer Himalayas are called the Shiwaliks. They are described as the youngest part of the Himalayas. Numerous valleys are found between the Lesser Himalayas and the Shiwaliks; these valleys are called Duns in the west and Duars in the east. Himadri is the name of the Greater Himalayas, and Mount Everest, the world's highest peak, is located in the Greater Himalayas. Thus, option (c) correctly identifies the Outer Himalayas.
19. **Explanation:** Loktak Lake is located in Manipur and is described as the largest freshwater lake in north-eastern India. It contains a floating national park called Keibul Lamjao, which gives it special significance. Lonar Lake in Maharashtra is a crater lake formed by a meteorite impact. Govind Ballabh Pant Sagar is an artificial lake created at the Rihand Dam. Sambhar is an inland saltwater lake. Thus, option (c) is correct.
20. **Explanation:** The Central Government approved the Pradhan Mantri Surya Sarovar Yojana (PM-SSY) on 31 July 2026 with an outlay of ₹5,070 crore. Projects will be approved during the financial years 2026-27 to 2030-31, and the disbursement of financial assistance will continue until the financial year 2032-33. Under this, 5,000 MW of floating solar PV and an Energy Storage System (ESS) with a storage duration of at least 2 hours (10,000 MWh) will be installed. According to the National Institute of Solar Energy (NISE), the total potential capacity of floating solar in India is 102.18 GW-Peak (not 500 GW-Peak). This will reduce CO₂ emissions by 1 crore tonnes annually.

21. **Explanation:** Captain Shivani has made history by being appointed the first woman Aide-de-Camp (ADC) to the Chief of the Army Staff (COAS) of the Indian Army. The main role of an ADC is to assist with administrative coordination, scheduling, protocol and ceremonial events. This historic appointment is an extremely important step towards promoting the growing participation and leadership capabilities of women in the Indian Armed Forces, as well as gender equality in the defence sector.
22. **Explanation:** Indian Grandmaster R. Praggnanandhaa won the 2026 Saint Louis Rapid and Blitz chess tournament title for the first time, scoring 23.5 points. He secured first place ahead of Uzbekistan's Javokhir Sindarov (22 points), while Wesley So finished third with 20.5 points. With this victory, he has moved closer to the Grand Chess Tour final. Notably, this is his second major title in 2026 (he had also won Norway Chess earlier).
23. **Explanation:** The Uttar Pradesh Cabinet has approved the proposal to establish Deep Tech U-Hubs in Lucknow and Noida. An initial budgetary provision of ₹100 crore has been made for this in the financial year 2026-27. The Noida U-Hub will primarily focus on quantum and advanced computing, semiconductor design, physical AI, robotics and defence technology. In contrast, the Lucknow U-Hub will prioritise application-based AI, GovTech, AI in industrial and healthcare services, and agricultural biotechnology. Thus, in statement 2, the major thematic areas have been linked to the wrong centre. Therefore, only statements 1 and 3 are correct.
24. **Explanation:** Squadron Leader Bhawana Kanth completed the 20-week Fighter Combat Leader (FCL) course at the Tactics and Air Combat Development Establishment (TACDE) in Gwalior. She became the first woman fighter pilot in the Indian Air Force to obtain this prestigious qualification. Bhawana Kanth, Avani Chaturvedi and Mohana Singh were the first three women pilots commissioned into the fighter stream of

the Indian Air Force on 18 June 2016. Thus, statements 1, 2 and 3 are all correct.

25. **Explanation:** Statement (d) is false. Within the Uttar Pradesh State Capital Region, there is a plan to develop an integrated industrial development area and a multimodal freight transport centre over an area of approximately 104 sq km in Bachhrawan, Raebareli. Several sectors are proposed, including automobiles and auto components, along with railway-related units, building materials, defence, food processing and logistics. Therefore, it is incorrect to describe it as being limited only to the automobile and cement industries. The project, with an estimated investment of approximately ₹26,000 crore, is expected to generate more than 2.50 lakh direct and approximately 5 lakh indirect employment opportunities.
26. **Explanation:** Agriculture, irrigation and power were accorded the highest priority in the First Five-Year Plan. During this plan period, the Community Development Programme was launched on 2 October 1952 for the integrated development of rural areas. Its objective was to promote the socio-economic development and self-reliance of rural society through public participation, self-help, cooperation and the use of local resources. Heavy and basic industries, machine-building and capital goods received the main emphasis under the Nehru-Mahalanobis strategy of the Second Five-Year Plan. Thus, option (b) is correct.
27. **Explanation:** On 19 July 1969, 14 major banks were nationalised. The objective was to align bank credit with national development priorities and extend institutional credit to more people and economic activities. The Monopolies and Restrictive Trade Practices Act, 1969 came into force on 1 June 1970. Its objective was to prevent the detrimental concentration of economic power, control monopolies and prohibit monopolistic and restrictive trade practices. The Foreign Exchange Management Act, 1999 came into force on 1 June 2000. It replaced

the Foreign Exchange Regulation Act, 1973 and shifted the focus of the foreign exchange regime towards management rather than control and towards facilitating foreign trade and payments. Thus, option (d) is correct.

28. **Explanation:** Welfare measures are not limited to providing only short-term relief to the poor. Their broader objective is to provide social and food security, increase employment and livelihood opportunities, improve access to financial services and productive resources, and develop human capital through education, health and skills. Such measures help reduce inequality, establish social justice and promote inclusive development. Thus, answer (b) is correct.
29. **Explanation:** The e-Shram portal is a national database of unorganised workers and helps them access various welfare and social security schemes. Pradhan Mantri Mudra Yojana is concerned with providing financial assistance to micro enterprises, while Startup India is a broad initiative that promotes innovation and startup entrepreneurship. Pradhan Mantri Gram Sadak Yojana is concerned with rural road connectivity, and Jal Jeevan Mission with providing drinking water through taps to rural households. Ration portability particularly helps eligible migrant ration-card beneficiaries obtain foodgrains even when they change their location. Therefore, the correct matching is A-2, B-4, C-3, D-1.
30. **Explanation:** Sanitation and personal health include safe water, washing hands with soap, proper use of toilets and cleanliness. These behaviours reduce the risk of diarrhoea and help prevent typhoid and cholera. Quality maternal and child health services help reduce maternal and infant mortality rates. A balanced diet, regular physical activity and maintaining a healthy weight reduce the risk of diabetes, hypertension, obesity and heart disease. Avoiding addictive substances such as tobacco and alcohol reduces the risk of associated cancers, liver disease and social harm. Therefore, option (a) is correct.

31. **Explanation:** Information, education and communication provides accurate information and raises awareness about a health topic. Behaviour change communication builds on this foundation to bring about positive changes in an individual's knowledge, attitudes, beliefs and behaviour. It is not limited to conveying messages, but emphasises adopting and maintaining health-promoting behaviours through interpersonal dialogue, motivation and a supportive environment. Therefore, option (b) is correct.

32. **Explanation:** Resource mobilisation does not mean merely raising funds. It also includes mobilising financial resources along with human resources, materials, voluntary labour, technical expertise, partnerships and local support, and using them effectively. Transparency and accountability increase the trust of stakeholders and the community. The involvement of local resources and manpower can strengthen local ownership and programme sustainability. Therefore, all three statements are correct.

33. **Explanation:** The targets for the extension of the National Health Mission for the financial years 2021-26 included reducing the maternal mortality ratio to 87 per one lakh live births, reducing the infant mortality rate to 22 per 1000 live births and maintaining the total fertility rate at 2.0 at the national level. India's national tuberculosis elimination target year was 2025, not 2035. Therefore, option (a) is correct, whereas the values or years given in the other options do not match the official targets.

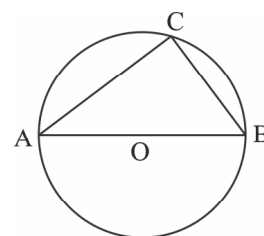
34. **Explanation:** Around 300 BC, Magadha experienced a severe famine lasting 12 years. Bhadrabahu went to Karnataka with his disciples, while some followers remained in Magadha with Stulabhadra. Later, owing to differences of opinion, Jainism split into two sects, Shvetambara and Digambara. Subsequently, Bhadrabahu's disciples in the tradition associated with the group that had gone south came to be known as Digambaras, while disciples of the tradition of the group that had remained in the north under Stulabhadra's leadership came to be known as Shvetambaras.

35. **Explanation:** Red pottery painted with black Colour was a distinctive feature of the Harappan civilisation. This fact is important for identifying the material culture of the Harappan civilisation. The other options either do not reflect this standard characteristic of Harappan pottery or resemble features of the Later Vedic period. Urban planning, seals, metallurgical knowledge and a distinctive pottery tradition are considered the principal identifying features of Harappan culture. Therefore, option (b) is correct.
36. **Explanation:** The Rigveda is the oldest and most important Veda in Vedic literature. It is stated to contain a total of 10 Mandalas, 1028 hymns and 10552 verses. The famous Gayatri Mantra is found in the third Mandala, and Vishvamitra is stated to be its composer. The ninth Mandala of the Rigveda is dedicated to Soma, not Agni.
37. **Explanation:** V.D. Savarkar founded an organisation named Mitra Mela in 1899 AD, which was reorganised in 1904 AD. Lala Har Dayal and Sohan Singh Bhakna were associated with the Ghadar Party. The Hindustan Republican Association was founded in 1924 AD by Ram Prasad Bismil, Sachindra Nath Sanyal, Jogesh Chandra Chatterjee, Chandrashekhar Azad and other revolutionaries. The Forward Bloc was founded by Subhas Chandra Bose in 1939 AD. Therefore, option (a) is correct.
38. **Explanation:** The Indus Waters Treaty of 1960 gives India control over the Eastern Rivers, while despite Pakistan's primary rights over the Western Rivers, India is permitted to make non-consumptive uses and construct run-of-the-river hydroelectric projects, such as Ratle and Kishanganga, subject to prescribed conditions. The Treaty's three-tier dispute-resolution framework is based on the Permanent Indus Commission, Neutral Expert and Court of Arbitration. India has rejected the jurisdiction of the parallel arbitration process, considering it illegal.

39. **Explanation:** The Arya Samaj was founded by Swami Dayanand Saraswati in Bombay in 1875 AD. He gave slogans such as 'Back to the Vedas' and 'India for Indians', which are associated with moral and nationalist ideas. Arya Samajists opposed untouchability, caste discrimination and child marriage, and supported widow remarriage and inter-caste marriage. The Shuddhi movement was also associated with Dayanand Saraswati.
40. **Explanation:** Buddha, Dhamma and Sangha are called the Triratna in Buddhism. The ultimate goal of Buddhism is Nirvana, which is described as liberation from the cycle of life and death. The Buddha's followers were divided into two groups, Bhikshus and Upasakas; Bhikshus were those who renounced worldly life to preach. Buddhism does not accept the existence of the soul.
41. **Explanation:** The term 'Integrated Control' was first introduced by Michelbacher and Bacon in 1952. The term 'Pest Management' developed from the concept of Geier and Clark and was popularised by Geier in 1966. The term 'Integrated Pest Management' acquired its systematic form after 1967. Rachel Carson's book 'Silent Spring' warned against the excessive use of pesticides and their adverse environmental and health effects.
42. **Explanation:** Botanical insecticides are derived from plants. The principal active ingredient of neem-based insecticides is azadirachtin; it deters insects from feeding and disrupts the moulting process. Nicotine is obtained from tobacco leaves and acts as a nerve poison. Rotenone is obtained from the roots of the 'Derris' plant and is highly toxic to fish. Pyrethrum is extracted from dried chrysanthemum flowers and acts rapidly.
43. **Explanation:** Dara sale is a major malpractice in agricultural marketing. In this practice, the crop is sold in a single common heap without grading. As a result, even good-quality produce does not fetch a fair price, because high

and low-quality produce are not sold at different prices. This causes losses to farmers and weakens quality-based marketing. In market reforms, grading, standardisation and transparent sales are considered important for reducing this problem.

44. **Explanation:** Cotton fibre quality is measured using various instruments. The Micronaire is used to measure cotton fibre thickness or fineness and maturity. The Stelometer measures cotton fibre strength. The Shirley Analyser is used to detect trash or foreign matter present in the fibre. These instruments assist in cotton quality assessment and marketing evaluation. Therefore, option (a) is the correct matching.
45. **Explanation:** $5 + x$, $2x + 7$, $6x + 9$, y are in proportion.
 $\therefore (5 + x) \times y = (2x + 7)(6x + 9)$
 $(5 + 2) \times y = (2 \times 2 + 7)(6 \times 2 + 9)$
 $7y = 11 \times 21$
 $y = 11 \times 3 = 33$
46. **Explanation:** $\frac{8^8 + 6}{7} = \frac{(7+1)^8 + 6}{7}$
Remainder = $\frac{(+1)^8 + 6}{7} = 0$
47. **Explanation:**



The longest chord of a circle is its diameter.

The angle subtended by the diameter of a circle at any point on the circle is 90° .

In other words –

The angle in a semicircle is a right angle.

$$\angle ACB = 90^\circ$$

48. **Explanation:** $\therefore x^2 + \frac{1}{x^2} = 119$
 $\therefore x + \frac{1}{x} = \sqrt{119 + 2} = \sqrt{121} = 11$
 $\therefore x^3 + \frac{1}{x^3} = (11)^3 - 3 \times 11$
 $= 1331 - 33$
 $= 1298$

49. **Explanation:** Odd numbers from 1 to 51 = 1, 3, 5, 7, 51
Required average =

$$\frac{\text{First Number} + \text{Last Number}}{2}$$

$$= \frac{1 + 51}{2} = 26$$
50. **Explanation:** The units digit of $562 \times 841 \times 927$
 $= 2 \times 1 \times 7$
 $= 14$
 Therefore, the required units digit = 4
51. **Explanation:** Clifford Geertz developed the concept of 'thick description', borrowed from Gilbert Ryle, in interpretive ethnography. This approach interprets behaviour not merely as an outward action, but in relation to its cultural context and social meanings. L.H. Morgan presented a unilinear evolutionary model of savagery, barbarism and civilisation in 'Ancient Society'. Franz Boas laid the foundations of historical particularism, which emphasises the unique history of each culture. R.R. Marett discussed pre-animistic animatism, which emphasised impersonal supernatural power such as 'mana' and religious awe. Therefore, the correct answer is (a).
52. **Explanation:** Down syndrome is an autosomal numerical chromosomal disorder. In its most common form, chromosome 21 fails to separate during meiosis at the time of gamete formation. As a result, after fertilisation, there are three copies of chromosome 21, and the total number of chromosomes becomes 47. This is called trisomy 21. Chromosome 21 is an autosome, not an X or Y sex chromosome. Therefore, Down syndrome is not considered a sex chromosome-linked disorder. In less common cases, it may also be caused by translocation or mosaicism. It may be characterised by delayed intellectual development, below-average height, low muscle tone and distinctive facial features. Both Assertion (A) and Reason (R) are correct, and the Reason correctly explains the Assertion.
53. **Explanation:** 'Lucy' is an approximately 3.2-million-year-old partial skeleton of *Australopithecus afarensis*, discovered in 1974 in the Hadar region of Ethiopia by Donald Johanson and Tom Gray. Its short and broad pelvis and the structure of its femur and knee were suited to habitual bipedal locomotion. *Australopithecus afarensis* had a cranial capacity of approximately 400–550 cc, which was much lower than that of modern humans. Therefore, only statements 1 and 2 are correct.
54. **Explanation:** The cephalic index is an anthropometric index of head shape. It is calculated by dividing the maximum breadth of the head by the maximum length of the head and multiplying the resulting ratio by 100.
 Cephalic index = (Maximum length of the head/Maximum breadth of the head) $\times$ 100
 In a simple classification, a head with an index below 75 is called dolichocephalic, one with an index from 75.0 to 79.9 is called mesocephalic, and one with an index of 80 or above is called brachycephalic. In detailed classifications, a separate category such as hyperbrachycephalic may also be included for values of approximately 85 or above. For the head of a living person, it is called the cephalic index, and for a dry skull, the cranial index. Therefore, the correct option is (a).
55. **Explanation:** In unilineal descent, an individual's descent affiliation is determined through the line of descent on either the father's or the mother's side. In a patrilineal system, the line of descent continues through male ancestors, and in a matrilineal system, through female ancestors. Both systems may include female and male members; the difference lies in the line through which descent is determined. The Khasi and Garo communities of Meghalaya are examples of a matrilineal system. A system that recognises descent relationships on both the mother's and father's sides is called bilateral or bilineal descent.
56. **Explanation:** In dendrochronology, the patterns of annual growth rings in suitable wood are matched with a known regional or master chronology. This allows specific calendar years to be assigned to the rings. Therefore, it is considered an absolute or chronometric dating method, not merely a relative method. The carbon-14 method generally dates carbon-containing organic materials up to approximately 50,000 years old. The potassium-argon method determines the absolute age of volcanic rocks and ash layers and often indicates the ages of associated fossils indirectly. Stratigraphy determines relative age based on the order of superposition of undisturbed layers. Therefore, option (c) is not correctly matched.
57. **Explanation:** Indian anthropologist Surajit Sinha was a leading proponent of the concept of the caste-tribe continuum. According to him, tribe and caste are not rigid and mutually exclusive socio-cultural categories, but two ideal poles of a continuum. Actual communities may occupy various intermediate positions between these two poles.
 Through cultural, economic and social contact, some tribal communities may acquire caste-like characteristics. However, this does not mean that all tribes necessarily transform into castes. This concept was influenced by Robert Redfield's folk-urban continuum and his studies of peasant society and culture.
58. **Explanation:** In Fortes and Evans-Pritchard's classification, stateless societies are those that lack centralised political authority, administrative machinery and formally constituted judicial institutions. This does not mean that these societies are ruleless or anarchic. In these societies, the segmentary lineage system, a mutual balance among territorial groups, customary norms and local mediation maintain the socio-political order. The Nuer, Tallensi and Logoli are major examples. Hence, option (a) is correct.

- 59. Explanation:** Participatory rural appraisal primarily emphasises the active participation of local people, their local knowledge and community empowerment. In this approach, villagers are not merely respondents who provide information, but analyse their resources, circumstances and problems themselves. They prepare social and resource maps, prioritise problems and formulate a local action plan. An external researcher or expert plays the role of a facilitator rather than imposing decisions. Therefore, option (b) is correct.
- 60. Explanation:** The word 'taboo' entered English from the Tongan word tapu. It means sacred, forbidden or set apart from ordinary use. In anthropology, a taboo is a socio-religious prohibition imposed on a person, object, place, food, word, relationship or behaviour. Its violation may be associated with social condemnation, punishment or fear of religious or supernatural consequences. The prohibition of sexual or marital relations between close relatives is a major example. By defining the cultural boundaries between the acceptable and the unacceptable, and between the pure and the impure, taboo helps maintain social norms, group identity, order and social control. Hence, option (b) is correct.
- 61. Explanation:** Here, the expression "preconception care" used in the option refers to antenatal care provided during pregnancy. At this stage, the health of the mother and foetus is monitored, risks are identified and preparations are made for delivery. This is followed by safe institutional delivery and postnatal care of the mother and newborn after birth. Subsequently, infant and child health services continue, and during adolescence attention is given to nutrition, mental health, menstrual hygiene and other health needs. Therefore, among the available options, (b) is correct.
- 62. Explanation:** Environmental health indicators measure environmental conditions that directly affect public health. Access to safe drinking water and sanitation services is one such major indicator. The absence of these facilities increases the risk of waterborne and faecally transmitted infectious diseases. The prevalence of underweight among children is an indicator of nutritional status. The infant mortality rate is a mortality-related indicator, whereas literacy is a socio-economic and educational indicator. Hence, option (c) is correct.
- 63. Explanation:** Gordon Allport proposed a highly influential definition of personality in psychology, describing it as the internal organisation of psychophysical systems rather than merely external appearance. Hence, Assertion (A) is true. In this definition, the word 'dynamic' indicates that although personality has an internal structure, it is flexible enough to be continually refined and developed in accordance with new experiences, education, age and the social environment. Hence, Reason (R) is also true and provides the correct explanation of Assertion (A).
- 64. Explanation:** In the five-factor model, conscientiousness denotes discipline and regularity, which are associated with taking medication regularly for TB or diabetes (A-1). Neuroticism is associated with emotional instability and stress (B-2). Openness to experience is the capacity to try new approaches and adopt new ideas (C-3). Extraversion, on the other hand, reflects sociability and group involvement (D-4). In public health, individual counselling is provided according to these traits. Hence, code (a) is correct.
- 65. Explanation:** The National Action Plan for Drug Demand Reduction (2018–2025) is a major initiative of the Ministry of Social Justice (Statement 1 is true). 'Nasha Mukh Bharat Abhiyaan' was launched on 15 August 2020 with the participation of young people and women in vulnerable districts of the country (Statement 2 is true). However, these two schemes are not intended solely for punitive action, but focus primarily on public awareness, the identification of at-risk groups, family counselling, treatment through de-addiction centres and the social rehabilitation of affected individuals. Hence, Statement 3 is false.
- 66. Explanation:** British psychologist Alan Baddeley changed the traditional view of short-term memory (STM). He showed that short-term memory is not merely a passive store that stores information for a short time, but is 'working memory'. While one performs mental calculations, understands instructions or makes decisions, it temporarily holds information, manipulates it and uses it in cognitive tasks. Hence, option (a) is the correct answer.
- 67. Explanation:** Psychology is called a science because it adopts the scientific method rather than relying on common sense, personal conjectures or philosophical beliefs. In it, behaviour is selected objectively for study, data are systematically recorded and conclusions are statistically verified. Hence, option (a), which describes personal conjectures and philosophical reflection as conclusive evidence, presents a false statement.
- 68. Explanation:** Genetic predisposition to disease by no means implies that it is 100 per cent certain that an individual will develop the disease. It merely increases biological susceptibility to the disease. If an individual is given appropriate health education and adopts 'environmental factors' such as a balanced diet, regular exercise, stress management and timely testing, the risk of the disease developing can be reduced. This is a practical example of the interaction between heredity and environment.
- 69. Explanation:** In retrieval success, information is available in long-term memory, but cannot be recalled at that moment because retrieval cues are absent or inappropriate. According to Tulving, the availability of information in memory and its immediate accessibility are distinct states. Cues associated with information during learning, such as a category name, the first letter, context, a smell or a picture, can facilitate recall. Appropriate cues increase the likelihood of recall, but do not guarantee immediate and certain recall. Hence, option (b) is correct.

- 70. Explanation:** According to Skinner, reinforcement is any stimulus, event or consequence present in the environment which, when presented immediately after a response (behaviour), increases the rate or likelihood of that behaviour being repeated. Both positive reinforcement (such as praise, rewards or health benefits) and negative reinforcement (relief from a painful stimulus) strengthen behaviour. It differs from punishment, because punishment weakens behaviour.
- 71. Explanation:** In psychology, the environment is not limited to the surrounding trees and plants or the climate. It includes all external conditions that affect an individual before and after birth. It includes the prenatal environment – such as the mother's health and nutrition during pregnancy; and the postnatal environment – such as the family environment, social class, culture, classmates and the media. All these factors together enhance or limit genetic potential. Hence, all the statements are true.
- 72. Explanation:** When the health knowledge, attitudes, misconceptions or behaviour of a large population (such as the population of a district or state) needs to be studied comprehensively within a short time, the 'survey method' is considered the most appropriate. In this method, data are collected from a representative sample through questionnaires, schedules or structured interviews. A case study provides depth but cannot represent a vast population, whereas laboratory experiments are not suitable for studying natural social behaviour.
- 73. Explanation:** Emotional Intelligence (EI) is the ability to recognise, understand, express and regulate one's own emotions and those of others; it is essential for stress management and mental health. Social intelligence, on the other hand, is the ability to understand social situations, interpersonal relationships and groups of people and to interact with them effectively and harmoniously. Public health officers require both to communicate sensitively with patients and the community. Hence, option (b) is correct.
- 74. Explanation:** In ordinary observation, an individual spontaneously observes events in everyday life without any specific plan or purpose. In contrast, 'scientific observation' in psychological research is carried out with a predetermined objective. Which specific behaviour is to be observed (selection), how it is to be recorded objectively (systematic recording) and how the data obtained are to be statistically analysed – all of this is determined in advance. In public health, toilet-use or handwashing habits are studied using this method.
- 75. Explanation:** The history of public health in India is associated with ancient urban planning. Hence, Assertion (A) is true. Direct evidence of this is provided by the scientific drainage and sanitation system of the ancient Indus Valley. Subsequently, the Vaccination Act (1880) and the Epidemic Diseases Act (1897) were introduced during the British period. The Bhore Committee (1943), constituted before independence, laid the foundation for primary health centres (PHC) in the country, after which NRHM (2005) and NHM (2013) were implemented. This historical sequence shows that the development of public health in India has been gradual. Hence, Reason (R) is also true and provides the correct explanation of Assertion (A).
- 76. Explanation:** Attitude structure has three main components: (1) the affective component – which expresses a feeling of liking or disliking an object; (2) the behavioural component – which indicates actual behaviour or action favourable or unfavourable to that idea; and (3) the cognitive component – which represents facts, knowledge or beliefs related to the subject. This matching shows that feeling, knowledge and action together form a complete attitude. Hence, code (a) is the correct answer.
- 77. Explanation:** Based on Aristotle's principles of rhetoric, the AIDA model is a scientific step-by-step framework for influencing consumer psychology in advertisements. First, the consumer's 'attention' is attracted, then 'interest' is aroused through the features of the product. This is followed by the creation of a strong 'desire' to obtain the product, which ultimately leads the consumer towards the direct 'action' of purchasing the item or adopting a health behaviour. Hence, option (a) presents the correct sequence.
- 78. Explanation:** According to Richard Nelson-Jones and Carl Rogers, counselling is a client-centred and collaborative process in which the counsellor enables an individual to make independent decisions without imposing any orders (Statements 1 and 2 are true). In the life cycle, marriage, employment or old age are regarded as normal 'normative developmental tasks', whereas sudden illness, job loss or an accident are unexpected 'non-normative tasks' that cause intense stress. Hence, all three statements are true.
- 79. Explanation:** Yoga is not merely physical exercise, but a system of holistic health. It removes toxic substances from the body through shatkarma (cleansing practices), enhances bodily immunity and respiratory capacity through asanas and pranayama, and establishes a balance between mind and body by reducing mental anxiety, insecurity and stress through meditation and concentration. It provides positive health at all three levels, physical, mental and spiritual.
- 80. Explanation:** Persuasive advertising does not use any coercion against the consumer, but persuades the consumer through arguments, emotions and appealing messages, thereby preserving the capacity for independent decision-making and developing brand loyalty. 'Strategic communication', on the other hand, is the planned use of advertising, public relations, and the media, with the aim of achieving an organisation's goals concerning a specific agenda, idea or behaviour change. Hence, option (b) is correct.

- 81. Explanation:** There are two main dimensions of the biological factors of social change: (1) non-human biological factors – changes in the natural environment, vegetation and organisms, which directly alter human livelihoods and lifestyles (Statement 1 is true); and (2) human biological factors – population size, birth rate, death rate, fertility rate and migration (Statements 2 and 3 are true). When the age structure of a population changes or migration brings together new races/cultures, profound changes occur in the social structure. Hence, all the statements are true.
- 82. Explanation:** These are micro informal means of social control: ‘fashion’ facilitates the acceptance of novelty in society by breaking away from old, rigid traditions; ‘non-violence’, in the Gandhian view, is the highest form of human control for overcoming evil through love, sacrifice and moral force; and ‘language’ is the primary medium that establishes emotional integration by transmitting society’s values, rules and culture from one generation to the next. Hence, option (b) is correct.
- 83. Explanation:** Values are not formed merely through the teachings of others, but mature by being tempered in the furnace of one’s own experiences. When an individual faces difficulties or moral dilemmas in life, introspection and their ‘voice of conscience’ make them aware of right and wrong. After experiencing suffering themselves, an individual becomes more sensitive (empathetic) to the pain of others, leading to the formation of internal values such as compassion and justice. Hence, option (b) is correct.
- 84. Explanation:** Altruism means improving the lives of others without any self-interest or expectation of a return. In mythological times, nature (rivers, trees) and Dadhichi’s sacrifice were its symbols. In the modern context, ‘organ donation’ and ‘eye donation’ are the highest forms of altruism, through which an individual, even after their own life has ended, brings light into a life shrouded in darkness or gives a new life to a dying patient. Hence, option (a) is correct.
- 85. Explanation:** The fundamental aim of persuasive communication is to redirect the recipient’s pre-existing views, beliefs or behaviours in a new and desired direction solely through effective arguments, emotional appeals, credibility and scientific information, without subjecting the recipient to any punitive pressure. This form of persuasive communication is used in public health campaigns (such as the Pulse Polio campaign or a sanitation campaign). Therefore, option (b) is correct.
- 86. Explanation:** The mass media do not merely present facts but also shape public opinion. In this context, ‘advertising’ increases product sales, ‘public relations’ builds the social reputation of institutions, and newspaper ‘editorials’ and ‘opinion columns’ influence readers’ views and government policies through their analytical perspectives on complex national/international issues. All these are major instruments of ‘persuasion’ in the media.
- 87. Explanation:** In occupational cancer studies, if workers at risk are compared with the general population, occupational risk may be underestimated because of the healthy worker selection effect, owing to the presence of unhealthy/unemployed people in the general population. Therefore, Assertion (A) is true. Administrative employees of the same factory are part of the employed workforce of the same institution, so they may be more comparable than the general population in terms of employment status and institutional context. If exposure assessment establishes that their exposure to the target chemical is negligible, they can serve as an appropriate internal reference group, primarily reducing the healthy worker selection effect; the healthy worker survivor effect is not completely eliminated. Therefore, Reason (R) is also true and provides a correct and logical explanation of Assertion (A).
- 88. Explanation:** Amartya Sen went beyond income to link poverty to the deprivation of an individual’s real capabilities and freedoms. The World Health Organization measures household financial hardship arising from health expenditure. The Oxford Poverty and Human Development Initiative and UNDP developed the global Multidimensional Poverty Index to measure combined deprivations in health, education and living standards. Wealth refers to accumulated assets such as houses, land and financial investments. Therefore, code (a) is correct.
- 89. Explanation:** According to the World Health Organization, a household’s out-of-pocket expenditure on health services is termed catastrophic health expenditure if it exceeds the standard threshold of 40% under WHO’s traditional capacity-to-pay method; under the revised 2025 global methodology, it is so termed if it exceeds 40% of the discretionary budget obtained after subtracting the societal poverty line from total consumption expenditure or income (Statement 1 is true). This situation, arising from sudden, recurring or long-term health expenditure, may put poor and lower-middle-income households at risk of having to sell their assets, borrow money or reduce expenditure on basic necessities, and of falling into poverty or becoming even poorer (Statement 2 is true). This concept is not limited solely to cosmetic surgery among wealthy households; therefore, Statement 3 is false.
- 90. Explanation:** Allocation bias arises when the allocation sequence is not random or when knowledge of upcoming allocations enables researchers to influence participants’ enrolment or group assignment (such as assigning seriously ill patients to the group receiving a promising drug). The most reliable method of preventing it is a computer-generated random sequence and allocation concealment; double-blinding is a supplementary measure in which neither the patient nor the treating doctor knows who is receiving which treatment. Along with this, ‘computer-generated randomisation’ makes allocation more unpredictable and reduces the risk of allocation bias; it does not guarantee the elimination of all types of bias.

- 91. Explanation:** 'Sociology of sanitation' views sanitation not merely as a matter of personal cleanliness or technical infrastructure, but as a social, cultural and community phenomenon. It analyses how society's caste system, gender roles, the availability of and unequal access to sanitation services and resources, poverty and traditional beliefs influence people's sanitation and WASH behaviours – such as toilet use, open defecation, waste management and handwashing. Sanitation is regarded as a shared social, civic and institutional responsibility that extends beyond individual behaviour.
- 92. Explanation:** In the structure of the female external genitalia, the external urethral opening, vaginal opening and anal opening (anus) are located very close to one another. After defecation, the correct scientific method of cleaning should always be 'from front to back'. If cleaning is done 'from back to front', *E. coli* and other harmful bacteria present in faeces may reach the external urethral opening and increase the risk of UTI. Therefore, option (a) is correct.
- 93. Explanation:** Cultural competence is the ability of health workers and healthcare institutions to understand the specific needs of patients from diverse cultural, linguistic and social backgrounds. It involves making shared treatment decisions on the basis of patient consent, clinical safety and scientific evidence, while respecting the patient's language, dietary traditions, cultural beliefs about medicines and family decision-making processes. This may improve communication and trust between the patient and the health worker and increase the likelihood of treatment adherence.
- 94. Explanation:** The interactionist approach (such as symbolic interactionism) is a micro-level perspective in sociology. It primarily studies face-to-face interactions in individuals' everyday lives, modes of conversation, symbols and the meanings they construct, rather than the broad structures of society. This approach does not deny the existence of biological disease, but examines how interactions among patients, families and physicians shape the social meaning, experience and identity of illness.
- 95. Explanation:** Under NRHM, the rural sub-mission of the National Health Mission, an 'ASHA' is a local female worker selected and trained at the village level. Her primary role is to act as a 'bridge' between the rural community and the government health system. She performs important tasks such as assisting with the early identification and registration of pregnant women, encouraging institutional deliveries, raising awareness of immunisation, distributing ORS and condoms, providing nutrition counselling, making timely referrals when necessary and helping beneficiaries reach an appropriate healthcare facility.
- 96. Explanation:** In sensitive self-report data, social desirability bias, a major form of reporting bias, arises when participants provide socially acceptable, incomplete, understated or overstated information instead of truthfully answering questions on socially sensitive or stigmatised topics (such as HIV/AIDS, sexual behaviour, domestic violence, or substance use). They conceal the actual information because of social shame, stigma or personal inhibitions. (They may conceal the actual information for fear of social stigma, shame, discrimination, breaches of confidentiality or socio-legal consequences.) To reduce this bias, anonymous surveys and confidential, self-administered interviews such as Audio Computer-Assisted Self-Interviewing (ACASI) are used.
- 97. Explanation:** In economics, 'income' is a 'flow' concept, referring to the financial resources (wages, profits, rent) received over a specified period (such as per month or per year). In contrast, 'wealth' is a 'stock' concept, representing the net worth obtained by subtracting liabilities from the total assets – such as a house, savings, shares and land – held by an individual at a specific point in time. After retirement, wage income may decline or cease, but income from pensions, interest, rent and other sources may continue. Wealth is an important foundation for health security, but insurance, social security and public health services are also important.
- 98. Explanation:** The modern concept of poverty views it not merely as a lack of income but as 'multidimensional deprivation'. Amartya Sen's 'capability approach' explains that poverty is the deprivation of real opportunities and freedoms to lead a healthy, educated and dignified life. The human rights approach links poverty to the deprivation of rights and treats it as both a cause and a consequence of human rights violations. Cash assistance alone does not automatically eliminate all deprivations relating to health, education, nutrition, safe water and sanitation; quality public services and structural measures are also required. Therefore, option (d) is the false statement.
- 99. Explanation:** Under France's Ancien Régime, the first two Estates (the clergy and nobility) enjoyed extensive tax privileges and were exempt in particular from the 'Taille' and many general direct taxes (Statement 1 is correct). Approximately 98% of the total population belonged to the Third Estate, which paid all taxes but was deprived of rights (Statement 2 is correct). Statement 3 is false because the religious tax collected by the clergy was called the 'Tithe', whereas the 'Taille' was a direct tax paid directly to the state.
- 100. Explanation:** In Buddhist architecture, stupas are classified into four main categories. Stupas built over the bodily relics (teeth, bones) of the Buddha or his eminent disciples are called 'Saririka'. Stupas built over objects used by them (begging bowls, robes) are called 'Paribhogika'. Stupas built to commemorate the eight major places

associated with the Buddha's life are called 'Uddesika'. Small stupas built by ordinary devotees as devotional offerings, for the accumulation of merit, to commemorate pilgrimages and in fulfilment of vows, however, were called 'votive or dedicatory stupas'.

101. Explanation: The 'Indian Statutory Commission' (popularly known as the Simon Commission), constituted to review the Government of India Act, 1919, was opposed throughout India (Assertion A is correct). The main reason for its boycott by the Indian National Congress and other parties was that this committee, which was to decide India's constitutional future, did not include a single Indian member (Reason R is correct). Therefore, it was called the 'White Commission'. Thus, (R) provides a correct and precise explanation of (A).

102. Explanation: The Samhita of the Shukla Yajurveda is called the Vajasaneyi Samhita, and it has two major extant recensions, Madhyandina and Kanva. It compiles the mantras and ritual formulae used in various sacrifices, including Darshapurnamasa, Vajapeya, Rajasuya and Ashvamedha. Statement (c) is false because the distinctive feature of the Shukla Yajurveda is that its mantra material is kept separate from Brahmana ritual explanations. The related explanatory material is found mainly in the Shatapatha Brahmana. In contrast, the Samhitas of the Krishna Yajurveda generally include mantras and Brahmana explanations within the same textual collection. However, it is also not appropriate to say that the Vajasaneyi Samhita contains only 'verse mantras'. Along with metrical verses, it also contains prose Yajus formulae; both form part of the mantra material. The Vajasaneyi tradition of the Shukla Yajurveda is traditionally regarded as associated with Maharshi Yajnavalkya, so Statement (d) is acceptable.

103. Explanation: After the plague in Ahmedabad had ended, the mill owners wanted to discontinue the 'plague

bonus', whereas the workers were demanding a 50% increase because of inflation (Statement a). Gandhiji intervened and fixed the demand at a 35% increase (Statement b). When the workers began to waver, Gandhiji resorted to his first 'hunger strike' (fast unto death) in India. Influenced by this, the mill owners eventually agreed to a 35% wage increase through arbitration by a tribunal (Statement c). Therefore, all the statements are correct.

104. Explanation: The Katha Upanishad is a major Upanishad associated with the Katha school of the Krishna Yajurveda. It is famous for the immortal dialogue between Yamaraja (the god of death) and the young boy 'Nachiketa'; therefore, option (b) is correct. In this dialogue, Nachiketa asks Yama profound questions about knowledge of the Self, the mystery of death and the nature of moksha. Yamaraja explains to him the distinction between Shreyas (the good) and Preyas (material pleasure).

105. Explanation: In the Revolt of 1857, Bahadur Shah Zafar was the nominal emperor in Delhi (actual commander Bakht Khan). In Kanpur, Peshwa Baji Rao II's adopted son Nana Saheb (associate Tatya Tope) led the revolt. In Awadh/Lucknow, Begum Hazrat Mahal assumed command after declaring her minor son Birjis Qadr the Nawab. In Jhansi, Rani Lakshmibai fought against the British in opposition to the 'Doctrine of Lapse'. Therefore, option (a) is correct.

106. Explanation: Crown rule was established under the 'Government of India Act, 1858', passed after the Revolt of 1857. On 1 November 1858, at a durbar held in Minto Park in Allahabad, Lord Canning read out Queen Victoria's historic proclamation (Queen's Proclamation); therefore, option (a) is correct. The proclamation promised to honour the treaties concluded with the princely states, not to seek further territorial expansion, to respect the rights and dignity of the rulers and not to interfere in the religious worship of Indians.

107. Explanation: On 12 January 1924, on Chowringhee Road in Calcutta, an Indian revolutionary named 'Gopinath Saha' made an unsuccessful attempt to assassinate Charles Tegart, Calcutta's cruel Police Commissioner, but unfortunately an English citizen, 'Ernest Day', was hit by a bullet and later died. It should be noted that 'Charles Tegart' was the Police Commissioner in Calcutta between 1923 and 1931.

108. Explanation: The Muslim League completely boycotted the first meeting of the Constituent Assembly held on 9 December 1946 and remained adamant in its demand for a separate Pakistan; therefore, statement (b) is false. Only 207 members attended this first meeting, and, following the French precedent, the senior-most member, Dr. Sachchidananda Sinha, was appointed temporary President. On 11 December, 1946 Dr. Rajendra Prasad was elected unopposed as the permanent President.

109. Explanation: In June 1948, Dr. Rajendra Prasad, President of the Constituent Assembly, constituted the 'Linguistic Provinces Commission' (Dar Commission) under the chairmanship of S. K. Dar, a retired judge of the Allahabad High Court. The Commission submitted its report in December 1948, recommending that States should be reorganised on the basis of 'administrative convenience' rather than language. This intensified opposition in South India, following which the JVP Committee was formed.

110. Explanation: The HSRA revolutionaries arrested in the Lahore Conspiracy Case went on a hunger strike in Lahore Central and Borstal Jails to secure the status of political prisoners and the provision of hygienic food and books. The revolutionaries began a collective fast (hunger strike) in prison on 15 June 1929, but Jitendranath Das began his fast on 13 July. After a hunger strike lasting 63 days, he was martyred on 13 September 1929. His martyrdom triggered an unprecedented wave of grief and national consciousness across the country.

- 111. Explanation:** The principal initiator of the Wahhabi Movement in India in the 19th century was Syed Ahmad Barelvi (Shaheed) of Rae Bareilly, who was influenced by the ideas of Abdul Wahhab of Arabia. The city of 'Patna' in Bihar became the most prominent and organised centre of this movement in India (option (a) is correct). Under the leadership of Inayat Ali and Wilayat Ali, the movement of funds, volunteers and secret letters for the ongoing campaigns in the North-West Frontier region was organised from Patna itself.
- 112. Explanation:** In the Vedic literary tradition, the first three Vedas—the Rigveda, Yajurveda and Samaveda—are collectively called 'Vedatrayi' (a group of three Vedas); therefore, option (a) is correct. This is because these three Vedas are primarily associated with supernatural and sacrificial subjects such as hymns in praise of deities, sacrificial rituals and vocal music. The Atharvaveda acquired a separate status later because it contained worldly subjects (medicine, tantra, everyday life) rather than supernatural sacrifices.
- 113. Explanation:** According to Article 343, the official language of the Union is Hindi in the Devanagari script, and the form of numerals is the international form of Indian numerals. Article 345 empowers the State Legislature to adopt Hindi or one or more languages in use in the State as its official language or languages. According to Article 348, the language of the Supreme Court, High Courts and authoritative legislative texts is generally English. Article 351 directs the Union to promote the spread and development of Hindi so that it may serve as a medium of expression for India's composite culture.
- 114. Explanation:** Parliament cannot abolish Fundamental Rights merely through an ordinary law; a constitutional amendment under Article 368 is necessary for this. Moreover, according to the Kesavananda Bharati case, even an amendment cannot damage the basic structure; therefore, statement (d) is false. Fundamental Rights act as a restraint on the powers of the State. The Fundamental Rights under Articles 15, 16, 19, 29 and 30 are available only to Indian citizens, whereas the others are also available to all persons (citizens and foreigners).
- 115. Explanation:** The 42nd Constitutional Amendment Act, 1976 transferred five subjects—education, forests, protection of wild animals and birds, weights and measures, and the constitution of courts other than the High Courts—from the State List to the 'Concurrent List'; therefore, option (c) is correct. Defence, railways, banking and atomic energy are subjects in the Union List. Police, public order and agriculture are subjects in the State List. Both the Centre and the States can legislate on subjects in the Concurrent List.
- 116. Explanation:** Under Article 213, the Governor can promulgate an ordinance only when at least one House of the State Legislature (or the House in a unicameral State) is not in session (statement (b) is correct). This is not a discretionary power of the Governor; rather, the Governor acts on the advice of the Council of Ministers. The ordinance must be approved within 6 weeks from the date on which the Legislature reassembles; otherwise, it ceases to have effect.
- 117. Explanation:** According to Article 137, the Supreme Court has full power to review any judgment or order pronounced by it (statement 1 is correct). Such a review is based on the emergence of a new fact in the evidence or an apparent/serious error of law in the decision (statement 2 is correct). This power applies equally to both civil and criminal cases; therefore, statement 3 is incorrect.
- 118. Explanation:** Part XIV of the Constitution deals with public services under the Union and the States. Part XV provides the constitutional framework relating to elections and the Election Commission. Part XVII contains provisions relating to the official language of the Union, regional languages and the language of the Supreme Court. Part XVIII contains provisions for national, constitutional and financial emergencies. Therefore, the matching in option (d) is entirely correct.
- 119. Explanation:** There is no constitutional provision for convening a joint sitting of the two Houses of Parliament in relation to a Constitution Amendment Bill (Article 108 applies only to ordinary and Financial Bills); therefore, statement (c) is false. An amendment Bill must be passed separately by both Houses of Parliament by a special majority. If the amendment affects federalism (the federal structure), ratification by the legislatures of at least half the States by a simple majority is also required.
- 120. Explanation:** The CBI is not a constitutional or statutory body; it is an executive body established by a resolution of the Ministry of Home Affairs (1963) (statement 1 is incorrect). The CBI derives its investigative powers from the 'Delhi Special Police Establishment Act, 1946' (statement 2 is correct). Under the Lokpal Act, its Director is selected by a committee comprising the Prime Minister (Chairperson), the Leader of the Opposition in the Lok Sabha and the Chief Justice of India (or their representative) (statement 3 is correct).
- 121. Explanation:** Under Article 263, the President is empowered to constitute an 'Inter-State Council' to establish coordination between the Centre and the States and among the various States. The Inter-State Council was constituted for the first time in 1990 on the basis of the recommendations of the Sarkaria Commission. The Prime Minister is its Chairperson, and the Chief Ministers of all States are its members. NITI Aayog and the National Development Council are non-constitutional/extra-constitutional bodies.

- 122. Explanation:** Article 51 directs the promotion of international peace and security, the maintenance of just and honourable relations between nations, and encouragement of the settlement of international disputes by arbitration (option (c) is correct). Article 50 relates to the separation of the judiciary from the executive. Article 44 relates to a Uniform Civil Code (UCC), while Article 40 directs the organisation of village panchayats.
- 123. Explanation:** According to Article 243-D, among the seats to be filled by direct election in every Panchayat, seats are reserved for the Scheduled Castes (SC) and Scheduled Tribes (ST) in proportion to their population. The same Article also provides that at least one-third of the total seats shall be reserved for women, including SC/ST women. Article 243-A relates to the Gram Sabha, Article 243-B to the constitution of Panchayats and Article 243-C to the composition of Panchayats.
- 124. Explanation:** The right to file a writ petition under Article 32 is not limited to citizens; where Fundamental Rights are also available to non-citizens/foreigners (as under Article 21), they too may approach the court under Article 32; therefore, option (c) is incorrect. Dr. Ambedkar called it the soul of the Constitution because it provides a constitutional remedy for the enforcement of rights. According to Article 32(3), Parliament may also confer this power on any other court.
- 125. Explanation:** According to the international standards of the World Health Organization (WHO), a body mass index ($BMI = \text{weight (kg)} / [\text{height (m)}]^2$) between 25.0 and 29.9 in adults falls within the 'overweight' category, whereas a BMI of 30.0 or above indicates 'obesity'. Excessive calorie intake and a sedentary lifestyle increase fat accumulation in the body. Obesity increases the risk of non-communicable diseases such as diabetes, hypertension, cardiovascular diseases and cancer. Therefore, option (b) is correct.
- 126. Explanation:** The Ayushman Bharat scheme, launched with the objective of achieving universal health coverage in India, is based on two mutually complementary pillars: 1. Ayushman Arogya Mandirs (formerly Health and Wellness Centres), which provide preventive, promotive and comprehensive care at the primary healthcare level. 2. Ayushman Bharat PM-JAY, which provides eligible beneficiary families with cashless health insurance cover of up to 5 lakh rupees per family per year for secondary and tertiary care hospitalisation.
- 127. Explanation:** The Union Ministry of Health and Family Welfare launched 'Mission Indradhanush' on 25 December 2014. The main objective of this major national programme is to ensure the full immunisation of all children (below 2 years of age) and pregnant women who have been partially missed or completely left out of routine immunisation campaigns. Under it, an intensive immunisation campaign is conducted against deadly diseases such as tuberculosis, diphtheria, whooping cough, tetanus, polio, measles, hepatitis-B and infections caused by *Haemophilus influenzae* type b.
- 128. Explanation:** The health geography of mountainous and high-altitude mountain regions differs from that of flat plains. Here, low atmospheric pressure and reduced oxygen levels (hypoxia) place additional biological stress on the body. In addition, inaccessible and dissected terrain, unpredictable weather and limited means of transport cause delays in emergency ambulance services and the referral system. This situation poses a major administrative and medical challenge, particularly in the management of obstetric emergencies, severe injuries and respiratory disorders.
- 129. Explanation:** Measles, dengue, COVID-19 (SARS-CoV-2) and influenza are all diseases caused by viral infections. In contrast, the diseases given in option (b) are caused by bacteria, those in option (c) by parasites/protozoa and helminths, while option (d) mainly includes fungal and bacterial infectious diseases (leprosy). Correct identification of the pathogen responsible for a disease determines the appropriate prevention and antiviral or antibiotic treatment policy. Therefore, only option (a) consists entirely of viral diseases.
- 130. Explanation:** The disaster management cycle is mainly divided into the pre-disaster phase (preparedness/mitigation), the phase during/immediately after a disaster (response), and the post-disaster phase (rehabilitation/reconstruction). The 'response phase' immediately after a disaster focuses on saving lives and reducing trauma. It includes immediate search and rescue, initial trauma care, safe drinking water supply (to prevent waterborne epidemics), temporary shelter, and surveillance of infectious diseases. Long-term infrastructure reconstruction and comprehensive economic and social restoration are associated with the subsequent recovery and reconstruction phases rather than immediate response.
- 131. Explanation:** The public health infrastructure in India is based on a three-tier system:
- 1. Primary level:** This includes Ayushman Arogya Mandirs operating at the sub-health centre and primary health centre levels, which provide preventive care and basic treatment as the first point of contact for the community.
 - 2. Secondary level:** This includes Community Health Centres (CHC) and district hospitals, where specialist medical care and general surgery are available.
 - 3. Tertiary level:** This includes medical colleges, AIIMS and super-speciality institutions, where advanced treatment for complex diseases and research are undertaken.
- Therefore, the correct sequence is primary → secondary → tertiary.

- 132. Explanation:** The 'National Vaccine Policy, 2011', announced by the Government of India, was formulated with the objective of strengthening the supply chain, quality and safety of vaccines in the country. The main scope of this policy is to integrate indigenous vaccine research and development, quality regulation, a transparent procurement process, the introduction of new vaccines into the Universal Immunisation Programme, and safety surveillance of adverse events following immunisation (AEFI).
- 133. Explanation:** Chromosomal disorders arise when the normal number of chromosomes (46) changes during cell division or when their physical structure undergoes breakage/rearrangement. For example: Down syndrome (trisomy of chromosome 21—a numerical change). These diseases are neither infectious nor lifestyle-induced, but arise at the genetic or cellular level.
- 134. Explanation:** Micronutrient deficiencies disrupt vital biological functions of the body. Vitamin A is essential for vision (rod cells) and immunity; its deficiency can cause night blindness. Iron is essential for the synthesis of haemoglobin in red blood cells (RBCs); its deficiency causes anaemia. Iodine is required for the production of the hormone thyroxine; its deficiency causes thyroid gland disorders such as goitre, intellectual disability and cognitive disorders. Therefore, option (a) is correctly matched.
- 135. Explanation:** Rabies is a fatal neurotropic viral disease transmitted through the bites or scratches of rabid animals (mainly dogs, cats, monkeys or foxes), or when their saliva comes into contact with an open wound. It is not transmitted through atmospheric water vapour or droplet aerosols (airborne). All the other options refer to hepatitis B transmitted through infected blood, body fluids, unsafe sexual contact and contaminated needles; typhoid caused by the bacterium *Salmonella typhi* and transmitted through contaminated water/food; and dengue transmitted by the female *Aedes aegypti* mosquito. Therefore, option (d) is correctly matched.
- 136. Explanation:** Rural areas experience seasonal hunger or the 'lean season' according to the agricultural cycle. This is usually the period between sowing and harvesting when opportunities for agricultural work and wage employment decline for landless labourers and small farmers. Reduced income affects households' ability to purchase food, resulting in calorie and micronutrient deficiencies, particularly among women and young children, which cause seasonal malnutrition.
- 137. Explanation:** An 'ASHA' (Accredited Social Health Activist) is an honorarium-based community health worker at the village level under the National Health Mission. Her main function is to act as a strong link between the community and the primary healthcare system (PHC/Sub-centre). She plays an important role in facilitating institutional deliveries for pregnant women, timely immunisation of children, family planning, nutrition education, and basic disease surveillance and referral for TB and other communicable diseases.
- 138. Explanation:** During floods or water crises, drinking water sources (wells, taps, pipelines) become contaminated with sewage and excreta. This allows bacteria (such as *Vibrio cholerae*, *Salmonella typhi*) and viruses (such as hepatitis A and E viruses) to enter the body through the faecal-oral route. As a result, infectious diseases such as diarrhoea, cholera, typhoid, dysentery and hepatitis A and E spread rapidly, causing dehydration and liver damage. Therefore, option (a) is the correct match.
- 139. Explanation:** The value of an intermediate good is included in the value of the final good. If the values of raw materials, semi-finished goods and the final product are added separately, the value of the same output will be counted multiple times. This is known as the problem of double counting. Therefore, under the production method of calculating national income, either the values of final goods and services are added, or only the value added at each stage of production is added. Both methods serve the same purpose: accurate estimation of the actual value of output and avoidance of repeated counting of the same value.
- 140. Explanation:** Net factor income from abroad is the difference between factor income, such as wages, interest, rent or profits, received from abroad by the normal residents of a country and such factor payments made within the country to non-residents. Adding it to domestic income gives national income. It differs from net exports; net exports are the difference between exports and imports of goods and services. Gifts and donations are transfer receipts, not factor income. Therefore, net factor income from abroad represents only the difference relating to returns to factors of production.
- 141. Explanation:** The Household Consumption Expenditure Survey provides detailed data on households' expenditure on food and non-food items and services. These data are used for updated estimates of indicators such as poverty, consumption inequality and social exclusion. Reliable measurement of households' per capita consumption expenditure is essential for consumption-based poverty estimation. The Periodic Labour Force Survey is primarily concerned with indicators relating to employment, unemployment and the labour force. Therefore, the Household Consumption Expenditure Survey is a more suitable source for consumption-based poverty analysis.
- 142. Explanation:** The Gender Inequality Index measures the loss arising from gender inequality across three dimensions: reproductive health, empowerment and the labour market. Reproductive health is measured by the maternal mortality ratio and the

adolescent birth rate, empowerment by the share of parliamentary seats held by women and attainment of at least secondary education, and the labour market by the labour force participation rate. Its value ranges from zero to one; zero indicates complete equality and one indicates complete inequality. The Gender Development Index compares female and male levels of human development in health, education and income, whereas the Gender Inequality Index focuses on the loss of opportunities in reproductive health, political or social empowerment and economic participation. It is used to make a comparative assessment of the extent of opportunity loss in women's development.

- 143. Explanation:** The classification of a good as a final or intermediate good depends on its economic use. A confectioner uses milk as a raw material in the production of sweets, so milk is an intermediate good for the confectioner. A household purchases the same milk for direct consumption, so it is a final consumption good for the household. Even if the name, shape or market price of the good remains the same, a change in its use can change its economic classification. In the calculation of national income, the value of the milk purchased by the confectioner will not be added separately; its contribution will already be included in the final value of the sweets.
- 144. Explanation:** The Global Multidimensional Poverty Index was jointly developed in 2010 by the Oxford Poverty and Human Development Initiative and the United Nations Development Programme. This index goes beyond a lack of income to measure deprivations in health, education and living standards. It is based on the Alkire-Foster method and uses a total of ten indicators. The purpose of this index is to identify the dimensions in which an individual and their household are simultaneously

deprived. In India, NITI Aayog is the nodal institution for developing the National Multidimensional Poverty Index.

- 145. Explanation:** Persons outside the labour force are those who are neither engaged in any economic activity, nor seeking work, nor available for work. Merely not working is not sufficient to classify someone as being outside the labour force; if a person did not work during the specified reference period but was seeking work or was available for work, the person will be regarded as unemployed and included in the labour force. An employed person is part of the workforce, while a worker who is available for work and waiting for seasonal work may be part of the unemployed labour force. This classification is necessary for the accurate measurement of the unemployment rate and labour force participation.
- 146. Explanation:** A stock is a quantity measured at a particular point in time. Examples of stocks include capital stock, population or money supply at a specific date. For their measurement, a specific moment, rather than a period, is important. In contrast, national income, output, consumption and investment are measured over a period such as a week, month or year, and are therefore flows. Capital stock is a stock, whereas the net increase in capital stock during a year, that is, net investment, is a flow. This distinction between a point in time and a period of time differentiates the two concepts.
- 147. Explanation:** The natural rate of unemployment is the sum of frictional and structural unemployment. Frictional unemployment arises from the short-term process of searching for and changing jobs, whereas structural unemployment is associated with imbalances in skills, technology and industry demand. Cyclical unemployment arises from a decline in aggregate demand and a downturn in the business cycle, so it is not included in natural unemployment.

Natural unemployment indicates that some unemployment may persist in the employment market despite normal economic activity, and that even when the economy is close to full employment, some unemployment may remain because of the structure and dynamics of the labour market.

- 148. Explanation:** Domestic territory is not confined to geographical land boundaries. It includes the territory within the country's political boundaries, territorial waters, airspace, maritime areas where it has rights to fishing and the extraction of fuels or minerals, and the country's embassies, consulates and military bases located abroad. In contrast, foreign embassies located within a country are not regarded as part of that country's domestic territory.
- 149. Explanation:** Before 2010, per capita gross domestic product at purchasing power parity was used for the income dimension of the Human Development Index. From 2010 onwards, per capita gross national income has been used in its place. Gross national income represents the income received by normal residents from within the country and abroad, so it was considered more appropriate for the national concept of standard of living. At the same time, in the education dimension, mean and expected years of schooling began to be used in place of the earlier adult literacy and gross enrolment indicators.
- 150. Explanation:** In the Human Development Report, 2025, India's per capita gross national income for 2023 is 9,046.76 purchasing power parity dollars, valued at the purchasing power parity of the base year 2021. This forms the basis of the standard-of-living dimension of the Human Development Index. 0.685 is India's Human Development Index value, whereas 13.5 and 24.82 crore are figures associated with the number of people who have moved out of multidimensional poverty.