

CIVIL POLICE CONSTABLE (NHK)

Questions, Answers and Detailed Explanations

1. Identify the correctly matched pairs:

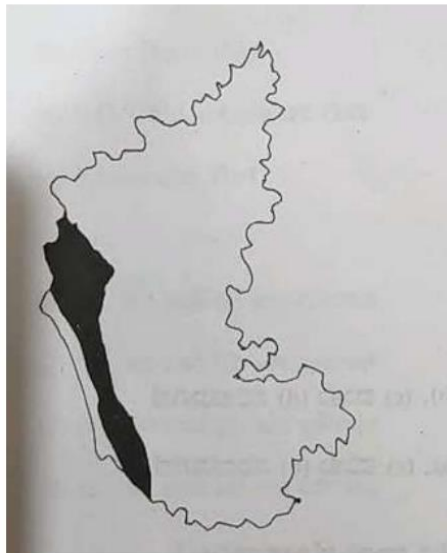
- (a) Bhor Ghat - Mumbai and Pune
- (b) Thal Ghat - Mumbai and Nashik
- (c) Pal Ghat - Rajsamand and Pali
- (d) Agumbe Ghat - Udupi and Shivamogga

- (1) (a), (b), (c) and (d) are correct
- (2) (a) and (b) are correct
- (3) (c) and (d) are correct
- (4) (a), (b) and (d) are correct

Answer: Option (1) - (a), (b), (c) and (d) are correct.

Explanation: Bhor Ghat carries the important Mumbai-Pune route across the Western Ghats, while Thal Ghat links the Mumbai region with Nashik. Pal Ghat (also called Desuri/Pal pass in this context) lies on the Rajsamand-Pali route in Rajasthan. Agumbe Ghat connects the coastal Udupi side with the Shivamogga-Malnad region. Hence, all four pairs are treated as correctly matched.

2. Identify the distribution of the soil type shown in the given map:



- (1) Alluvial soil
- (2) Laterite soil
- (3) Black soil
- (4) Red soil

Answer: Option (2) - Laterite soil.

Explanation: The shaded belt lies along Karnataka's high-rainfall western and south-western tract. Intense leaching under heavy rainfall and high temperature removes soluble bases and silica, leaving iron- and aluminium-rich lateritic material. Laterite soils are therefore common along the Western Ghats and the adjoining coastal uplands.

3. Consider the following urban classification:

- (a) City

- (b) Megacity
(c) Megalopolis
(d) Conurbation

Which is the correct sequence from smaller to higher size of population?

- (1) (d), (c), (a) and (b)
(2) (b), (a), (c) and (d)
(3) (a), (b), (d) and (c)
(4) (a), (d), (c) and (b)

Answer: Option (3) - City, Megacity, Conurbation and Megalopolis.

Explanation: A city is a single urban settlement. A megacity is a very large city, conventionally with a population of at least ten million. A conurbation develops when neighbouring cities and towns expand and merge into a continuous urban region. A megalopolis is an even larger, functionally connected chain of metropolitan areas or conurbations. Thus, the intended order is city < megacity < conurbation < megalopolis.

4. Which of the following pairs are correct regarding the ports of India?

- (a) Jawaharlal Nehru Port - Nhava Sheva
(b) Deendayal Port - Kandla
(c) V.O. Chidambaranar Port - Paradip
(d) Kamarajar Port - Ennore

- (1) (a), (b) and (c) are correct
(2) (b), (c) and (d) are correct
(3) (a), (b) and (d) are correct
(4) (a), (c) and (d) are correct

Answer: Option (3) - (a), (b) and (d) are correct.

Explanation: Jawaharlal Nehru Port is popularly known as Nhava Sheva. Kandla Port was renamed Deendayal Port, and Ennore Port was renamed Kamarajar Port. V.O. Chidambaranar Port is at Thoothukudi in Tamil Nadu, whereas Paradip Port is in Odisha. Therefore, pair (c) is incorrect.

5. From which of the following States does the Tropic of Cancer not pass through?

- (1) Rajasthan
(2) Madhya Pradesh
(3) Bihar
(4) West Bengal

Answer: Option (3) - Bihar.

Explanation: The Tropic of Cancer passes through eight Indian States: Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal, Tripura and Mizoram. It does not pass through Bihar.

6. Match the following:

List-I (Cement Production Plants)	List-II (States)
(a) Lakheri	(i) Telangana
(b) Vijayawada	(ii) Rajasthan
(c) Ramagundam	(iii) West Bengal
(d) Durgapur	(iv) Andhra Pradesh

- (1) a-iv, b-i, c-iii, d-ii
- (2) a-ii, b-i, c-iii, d-iv
- (3) a-ii, b-iv, c-i, d-iii
- (4) a-ii, b-iii, c-i, d-iv

Answer: Option (3) - a-ii, b-iv, c-i, d-iii.

Explanation: Lakheri is a major cement centre in Rajasthan. Vijayawada is in Andhra Pradesh, Ramagundam is in Telangana, and Durgapur is in West Bengal. The correct matching is therefore Lakheri-Rajasthan, Vijayawada-Andhra Pradesh, Ramagundam-Telangana and Durgapur-West Bengal.

7. The busiest inland waterway in the world is:

- (1) The Danube Inland Waterway
- (2) The Mississippi Inland Waterway
- (3) The Rhine Inland Waterway
- (4) The Volga Inland Waterway

Answer: Option (3) - The Rhine Inland Waterway.

Explanation: The Rhine is one of the world's most intensively used commercial inland waterways. It links major industrial regions of Switzerland, Germany, France and the Netherlands with the North Sea port complex, particularly Rotterdam, and carries large volumes of bulk and container cargo.

8. The Southern Transcontinental Railway Route connects which two cities?

- (1) Los Angeles and New York
- (2) San Francisco and New York
- (3) Vancouver and Halifax
- (4) Seattle and New York

Answer: Option (2) - San Francisco and New York.

Explanation: In standard world-geography classifications, the southern transcontinental railway route of the United States is described as connecting the Atlantic-side New York region with San Francisco on the Pacific coast. Vancouver-Halifax is a Canadian transcontinental connection.

9. Identify the factor/factors which do not influence climate:

- (a) Altitude
 - (b) Longitude
 - (c) Latitude
 - (d) Winds
- (1) (b) and (d)
 - (2) (a), (b) and (c)
 - (3) (a) and (d)
 - (4) (b) only

Answer: Option (4) - (b) only.

Explanation: Latitude controls solar angle and seasonal receipt of energy; altitude affects temperature and pressure; and winds transport heat and moisture. Longitude by itself is not a primary climatic control. Its apparent association with climate generally arises through other factors such as distance from the sea, relief and circulation.

10. Bengaluru and Hyderabad International Airports are located far from the cities. Therefore, they are called _____ airports.

- (1) Urban-centre
- (2) Greenfield
- (3) Commerce-oriented
- (4) Passenger-oriented

Answer: Option (2) - Greenfield airports.

Explanation: A greenfield airport is developed on a new site rather than by expanding an existing airport. Kempegowda International Airport and Rajiv Gandhi International Airport were built outside the older city cores on new sites, with scope for planned expansion and associated infrastructure.

11. In which State of India is the Bodo/Boro language mainly spoken?

- (1) Manipur
- (2) Sikkim
- (3) Tripura
- (4) Assam

Answer: Option (4) - Assam.

Explanation: Bodo, also written Boro, is a Tibeto-Burman language spoken mainly by the Bodo community of Assam, especially in the Bodoland Territorial Region and adjoining areas. It is one of the languages included in the Eighth Schedule of the Constitution.

12. Identify the persons related to the Deccan Education Society:

- (a) Bal Gangadhar Tilak
- (b) V.K. Chiplunkar
- (c) Tulasiram
- (d) Gopal Ganesh Agarkar

Choose the correct answer.

- (1) (a) and (b)
- (2) (a), (b) and (c)
- (3) (a), (b) and (d)
- (4) (b), (c) and (d)

Answer: Option (3) - (a), (b) and (d).

Explanation: The Deccan Education Society was founded in Pune in 1884 by nationalist educationists including Bal Gangadhar Tilak, Vishnushastri (V.K.) Chiplunkar and Gopal Ganesh Agarkar, along with colleagues such as Mahadev Ballal Namjoshi and Vaman Shivram Apte. Tulasiram is not included among its recognised founders.

13. Match the following:

List-I (Author)	List-II (Books)
(a) Muhammad Iqbal	(i) Bandi Jeevan
(b) Lala Lajpat Rai	(ii) Neel Darpan
(c) Dinabandhu Mitra	(iii) The Reconstruction of Religious Thought in Islam
(d) Sachindra Nath Sanyal	(iv) Unhappy India

- (1) a-iv, b-iii, c-ii, d-i
- (2) a-iii, b-iv, c-ii, d-i
- (3) a-ii, b-iv, c-i, d-iii
- (4) a-ii, b-iii, c-iv, d-i

Answer: Option (2) - a-iii, b-iv, c-ii, d-i.

Explanation: Muhammad Iqbal wrote The Reconstruction of Religious Thought in Islam. Lala Lajpat Rai wrote Unhappy India. Dinabandhu Mitra authored the anti-indigo-plantation drama Neel Darpan. Revolutionary Sachindra Nath Sanyal wrote Bandi Jeevan, an autobiographical account of the freedom struggle.

14. What is the correct chronological sequence of the following events?

- (a) Jallianwala Bagh Tragedy
- (b) Quit India Movement
- (c) Partition of Bengal
- (d) The Surat Split

- (1) (a), (b), (c), (d)
- (2) (b), (c), (d), (a)
- (3) (c), (d), (a), (b)
- (4) (d), (c), (a), (b)

Answer: Option (3) - (c), (d), (a), (b).

Explanation: The Partition of Bengal took place in 1905. The Surat Split in the Indian National Congress occurred in 1907. The Jallianwala Bagh massacre occurred on 13 April 1919, and the Quit India Movement was launched in August 1942. Hence the sequence is 1905-1907-1919-1942.

15. Who was popularly known as 'Lokahitavadi'?

- (1) Pandit Vidyasagar
- (2) Gopal Hari Deshmukh
- (3) Raja Ram Mohan Roy
- (4) Dayananda Saraswati

Answer: Option (2) - Gopal Hari Deshmukh.

Explanation: Gopal Hari Deshmukh used the pen name 'Lokahitawadi' in his reformist writings, especially the Shatapatre or 'Hundred Letters'. He criticised social orthodoxy and advocated rationalism, women's education, widow remarriage and social reform in nineteenth-century Maharashtra.

16. Where are the Romans said to have built the Temple of Augustus in India?

- (1) Pataliputra

- (2) Badami
- (3) Halebeedu
- (4) Muziris

Answer: Option (4) - Muziris.

Explanation: Muziris was an important ancient port on the Malabar Coast with extensive Indo-Roman trade. Classical references and archaeological discussions associate the port's Roman merchant community with a temple dedicated to Emperor Augustus, illustrating the intensity of Mediterranean commercial contacts.

17. Match the following:

List-I	List-II
(a) Central College, Bengaluru	(i) Dravidian style
(b) Sharadamba Temple, Sringeri	(ii) Modern style
(c) Vani Vilas Hospital, Bengaluru	(iii) Indo-Islamic style
(d) Kamal Mahal, Hampi	(iv) Gothic style

- (1) a-i, b-ii, c-iii, d-iv
- (2) a-iv, b-iii, c-ii, d-i
- (3) a-iii, b-ii, c-i, d-iv
- (4) a-iv, b-i, c-ii, d-iii

Answer: Option (4) - a-iv, b-i, c-ii, d-iii.

Explanation: Central College, Bengaluru, is associated with the Gothic/colonial architectural idiom. The Sharadamba Temple at Sringeri follows the Dravidian temple tradition. Vani Vilas Hospital is assigned here to the modern style, while Kamal Mahal at Hampi displays Indo-Islamic elements characteristic of Vijayanagara court architecture.

18. Which of the following statements are related to the Hoysala King Vishnuvardhana?

- (a) Vishnuvardhana assumed the title 'Nolambavadigonda'.
- (b) Vishnuvardhana gave shelter to Ramanujacharya.
- (c) Vishnuvardhana was married to a Chola princess, Cholamahadevi.
- (d) Vishnuvardhana shifted his capital to Dwarasamudra.

Choose the correct answer.

- (1) (a), (b) and (c)
- (2) (a), (c) and (d)
- (3) (b), (c) and (d)
- (4) (a), (b) and (d)

Answer: Option (4) - (a), (b) and (d).

Explanation: Vishnuvardhana used titles linked to his conquests, including Nolambavadigonda. The Sri Vaishnava teacher Ramanuja received patronage in the Hoysala region, and Dwarasamudra (Halebidu) became the Hoysala capital. Vishnuvardhana's celebrated queen was Shantala Devi; the statement identifying his wife as the Chola princess Cholamahadevi is not accepted in the usual historical account.

19. Who among the following Ashtadiggajas of Krishnadevaraya received the title 'Sangeetha Sahithya Samarangana Saarvabhouma'?

- (1) Allasani Peddana
- (2) Pingali Suranna
- (3) Nandi Thimmanna
- (4) Tenali Ramakrishna

Answer: No correct option - the title is associated with Krishnadevaraya himself.

Explanation: This item is defective. Krishnadevaraya is widely described by the honorific 'Sahiti/Sahitya Samarangana Sarvabhauma', highlighting his eminence in letters, and related variants add 'Sangeetha'. It is not a standard title of any one of the four listed Ashtadiggajas. Allasani Peddana was instead celebrated as 'Andhra Kavita Pitamaha'.

20. Arrange the following invasions of India in chronological order and select the correct answer:

- (a) The Shaka invasion
- (b) The Indo-Greek invasion
- (c) The Kushana invasion
- (d) The Parthian invasion

- (1) (d), (c), (b), (a)
- (2) (c), (b), (a), (d)
- (3) (b), (a), (d), (c)
- (4) (a), (d), (c), (b)

Answer: Option (3) - (b), (a), (d), (c).

Explanation: The Indo-Greeks entered north-western India after the decline of Mauryan power, beginning in the second century BCE. Shaka groups followed, then Indo-Parthian rulers became prominent, and the Kushanas established a major empire in the first centuries CE. The intended order is Indo-Greek-Shaka-Parthian-Kushana.

21. Arrange the following Dewans of Mysore in chronological order.

- (1) V.P. Madhava Rao, T. Ananda Rao, P.N. Krishnamurthy
- (2) P.N. Krishnamurthy, V.P. Madhava Rao, T. Ananda Rao
- (3) T. Ananda Rao, P.N. Krishnamurthy, V.P. Madhava Rao
- (4) P.N. Krishnamurthy, T. Ananda Rao, V.P. Madhava Rao

Answer: Option (2) - P.N. Krishnamurthy, V.P. Madhava Rao, T. Ananda Rao.

Explanation: P.N. Krishnamurthy served first, followed by V.P. Madhava Rao and then T. Ananda Rao in the early twentieth-century sequence of Dewans of Mysore. The order reflects their respective tenures in the Mysore administration.

22. Consider the following statements:

Statement I: The Indian soldiers were poorly equipped in the Revolt of 1857.

Statement II: The British had to pour immense supplies of people, money and arms into the country.

Choose the correct answer from the options given below.

- (1) Both Statements I and II are correct and Statement II is related to Statement I
- (2) Both Statements I and II are correct but Statement II is not related to Statement I
- (3) Statement I is correct but Statement II is incorrect

(4) Statement I is incorrect but Statement II is correct

Answer: Option (2) - Both statements are correct, but Statement II is not the explanation of Statement I.

Explanation: Many rebel units suffered from uneven weaponry, ammunition and central organisation. At the same time, the scale of the uprising compelled the British to bring major reinforcements, finance and arms into India. The second statement describes the British response to the extent of the revolt; it does not explain why Indian soldiers were poorly equipped.

23. Consider the following statements:

Statement I: The Sikhs were defeated against the English as Ranjit Singh was despotic.

Statement II: They failed to protect the Sikh kingdom against the British onslaughts.

Choose the correct answer from the options given below.

- (1) Both Statements I and II are correct and Statement II is related to Statement I
- (2) Both Statements I and II are correct but Statement II is not related to Statement I
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Answer: Option (4) - Statement I is incorrect but Statement II is correct.

Explanation: Ranjit Singh died in 1839, before the Anglo-Sikh Wars, and his alleged despotism is not a valid explanation for Sikh defeat. The weakening of central authority, factional conflict and British military pressure after his death were more relevant. Ultimately, the Sikh kingdom could not withstand the British campaigns and was annexed in 1849.

24. Match the Republics/States of the sixth century BCE with their capitals:

List-I (State)	List-II (Capital)
(a) Avanti	(i) Kausambi
(b) Kosala	(ii) Rajagriha
(c) Vatsa	(iii) Ujjain
(d) Magadha	(iv) Ayodhya

- (1) a-ii, b-i, c-iv, d-iii
- (2) a-iii, b-ii, c-i, d-iv
- (3) a-iii, b-iv, c-i, d-ii
- (4) a-i, b-ii, c-iii, d-iv

Answer: Option (3) - a-iii, b-iv, c-i, d-ii.

Explanation: Avanti's prominent capital was Ujjain; Kosala was associated with Ayodhya (and also Shravasti in different periods); Vatsa had its capital at Kausambi; and Magadha's early capital was Rajagriha. Therefore the correct code is a-iii, b-iv, c-i, d-ii.

25. Who among the following was not an important deity during the Rigvedic period?

- (1) Agni
- (2) Prajapati
- (3) Varuna
- (4) Soma

Answer: Option (2) - Prajapati.

Explanation: Agni, Varuna and Soma occupy prominent positions in the Rigveda. Prajapati rose to much greater importance in the later Vedic period, when sacrificial ritual and speculation about a creator-lord became more developed. Therefore Prajapati is the best answer.

26. Consider the following statements regarding the Child Marriage Restraint Act:

Statement I: The Child Marriage Restraint Act was passed in 1929 and was popularly known as the 'Sarda Act'.

Statement II: It fixed the marriage age of boys and girls at 18 and 14 respectively.

- (1) Both Statements I and II are correct and Statement II explains Statement I
- (2) Both Statements I and II are correct but Statement II does not explain Statement I
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Answer: Option (2) - Both statements are correct, but Statement II does not explain Statement I.

Explanation: The Act was enacted in 1929 and became known as the Sarda Act after its sponsor, Harbilas Sarda. It prescribed minimum marriage ages of 18 for males and 14 for females at the time. The age provision describes the law's content; it does not explain why the law acquired the name 'Sarda Act'.

27. Which among the following works compares King Harshavardhana with Bhasa and Kalidasa?

- (1) Jayadeva's Gita Govinda
- (2) Banabhatta's Harshacharita
- (3) Mayura's Surya Shataka
- (4) Hiuen-Tsang's Si-Yu-Ki

Answer: Likely intended answer: Option (2) - Banabhatta's Harshacharita.

Explanation: Harshacharita is Banabhatta's court biography of Harshavardhana and is the only listed literary work centred on the king. However, the wording 'compares Harshavardhana with Bhasa and Kalidasa' is not a standard, readily verifiable formulation. The item should therefore be treated cautiously; option (2) is the probable examination-key answer rather than an unqualified textual conclusion.

28. Who among the following Chola rulers did NOT undertake an invasion of Sri Lanka?

- (1) Karikala
- (2) Aditya I
- (3) Rajaraja I
- (4) Rajendra I

Answer: Option (2) - Aditya I.

Explanation: Rajaraja I conquered northern Sri Lanka, and Rajendra I extended Chola control over the island. Tamil traditions also associate Karikala with a Sri Lankan expedition and the use of captives for embankment works. Aditya I is not associated with such an invasion in the standard account.

29. Which of the following monuments was not built by Sher Shah Sur?

- (1) Tomb of Sasaram
- (2) Purana Qila
- (3) Kushk-i-Siri
- (4) Rohtasgarh Fort

Answer: Option (3) - Kushk-i-Siri.

Explanation: Sher Shah's architectural legacy includes his mausoleum at Sasaram and major works at Purana Qila and Rohtas. Kushk-i-Siri was a palace complex associated with Alauddin Khalji at Siri in Delhi, not Sher Shah Sur.

30. Match the following and choose the correct answer:

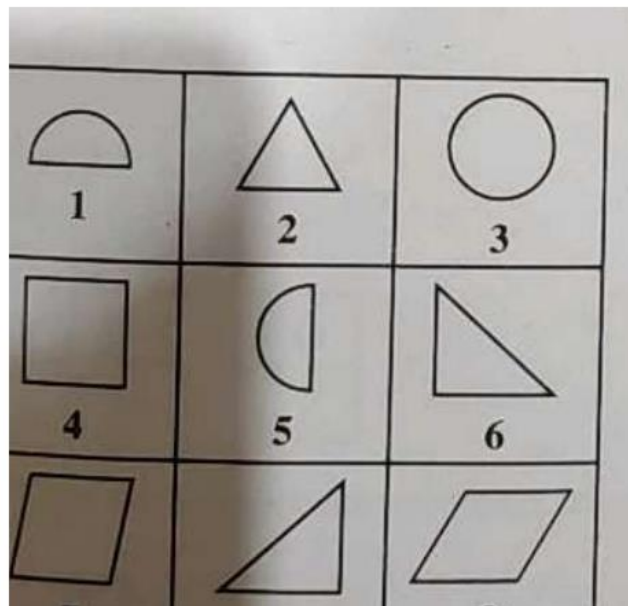
List-I	List-II
(a) Guru Ram Das	(i) Established Akal Takht
(b) Guru Arjun Dev	(ii) Compilation of the Adi Granth
(c) Guru Hargobind	(iii) Established Khalsa
(d) Guru Gobind Singh	(iv) Established Amritsar City

- (1) a-i, b-ii, c-iii, d-iv
- (2) a-iv, b-i, c-iii, d-ii
- (3) a-iii, b-iv, c-ii, d-i
- (4) a-iv, b-ii, c-i, d-iii

Answer: Option (4) - a-iv, b-ii, c-i, d-iii.

Explanation: Guru Ram Das founded the settlement that developed into Amritsar. Guru Arjun compiled the Adi Granth. Guru Hargobind established the Akal Takht and articulated the complementary authority of miri and piri. Guru Gobind Singh founded the Khalsa in 1699.

31. Group the given figures into three classes, using each figure only once.



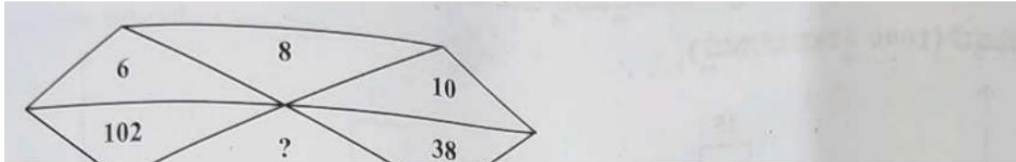
- (1) 1,3,5 ; 2,6,8 ; 4,7,9
- (2) 1,3,5 ; 2,6,9 ; 4,7,8
- (3) 2,3,4 ; 5,6,8 ; 9,1,7

(4) 3,2,4 ; 6,5,8 ; 7,9,1

Answer: Option (1) - 1,3,5 ; 2,6,8 ; 4,7,9.

Explanation: Figures 1, 3 and 5 are circular forms: a semicircle, a full circle and a vertical semicircle. Figures 2, 6 and 8 are triangular forms. Figures 4, 7 and 9 are quadrilaterals. This classification uses each figure exactly once and groups them according to the number/type of boundaries.

32. The number that comes in place of '?' is:



- (1) 75
- (2) 68
- (3) 56
- (4) 66

Answer: Option (4) - 66.

Explanation: The intended answer key is 66. One consistent reading uses the central top number 8: $8^2 + 2 = 66$, while the side values can be related to the adjacent square combinations, $6^2 + 8^2 + 2 = 102$ and $10^2 - 8^2 + 2 = 38$. Because the diagram does not state the rule, more than one artificial pattern could be proposed; 66 is the intended rather than uniquely compelled result.

33. If the curved surface area of a cone is 528 cm^2 and its slant height is 12 cm, then the radius of the cone is:

- (1) 16 cm
- (2) 14 cm
- (3) 12 cm
- (4) 10 cm

Answer: Option (2) - 14 cm.

Explanation: Curved surface area of a cone $= \pi r l$. Therefore, $528 = (22/7) \times r \times 12$. Thus $r = 528 \times 7 / (22 \times 12) = 14 \text{ cm}$.

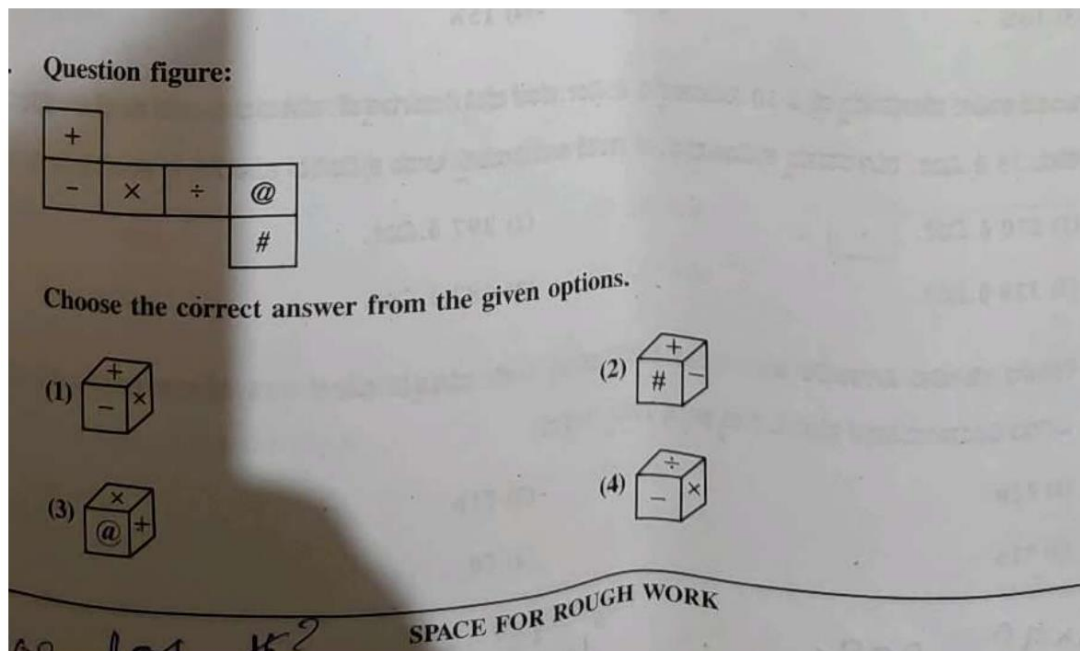
34. If L means 'plus', M means 'minus' and N means 'minus', then $1L9M9N1 = ?$

- (1) 1
- (2) -1
- (3) 2
- (4) 0

Answer: Option (4) - 0.

Explanation: Replacing the coded symbols gives $1 + 9 - 9 - 1$. Evaluating from left to right: $10 - 9 - 1 = 1 - 1 = 0$.

35. Question figure: Choose the correct cube from the given options.

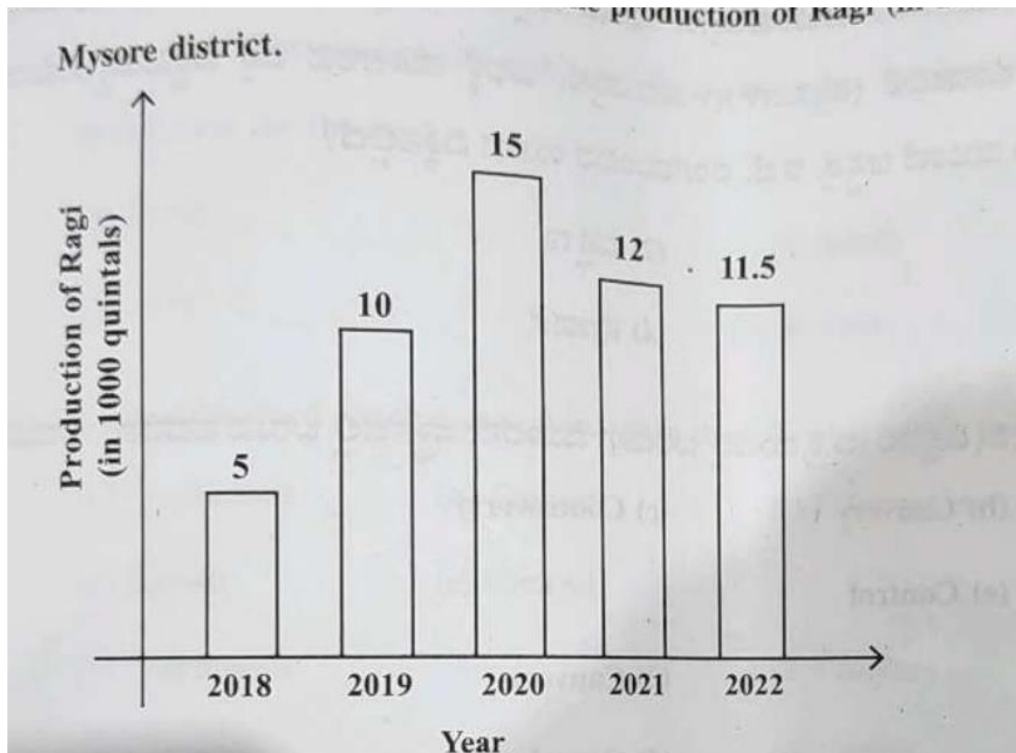


- (1) Cube shown in option 1
- (2) Cube shown in option 2
- (3) Cube shown in option 3
- (4) Cube shown in option 4

Answer: Option (1).

Explanation: From the net, the opposite face pairs are $(-, \div)$, $(x, @)$ and $(+, \#)$. Opposite faces cannot share an edge in the folded cube. Option (1) shows $+$, $-$ and x meeting, and none of these pairs is opposite. The other displayed arrangements place an opposite pair together or conflict with the orientation of the net.

36. The bar graph shows the production of ragi (in 1,000 quintals) in Mysore district in different years. What is the percentage increase in production between 2019 and 2020?



- (1) 50%
- (2) 5%
- (3) 10%
- (4) 15%

Answer: Option (1) - 50%.

Explanation: Production rose from 10 thousand quintals in 2019 to 15 thousand quintals in 2020.
Increase = $15 - 10 = 5$. Percentage increase = $(5/10) \times 100 = 50\%$.

37. The speed of a car is increased by 2 km/h after every 30 minutes. If the distance travelled in the first one hour was 35 km, what is the distance travelled in 7 hours?

- (1) 270 km
- (2) 297 km
- (3) 329 km
- (4) 287 km

Answer: Option (3) - 329 km.

Explanation: Let the speed during the first half-hour be v km/h; in the second half-hour it is $v+2$. Distance in the first hour is $0.5v + 0.5(v+2) = v+1 = 35$, so $v=34$. There are 14 half-hour intervals in seven hours, with speeds 34, 36, ..., 60. Their sum is $14/2 \times (34+60) = 658$; multiplying by 0.5 hour gives 329 km.

38. The difference between a single discount of 40% on ₹500 and two successive discounts of 30% and 10% on the same amount is:

- (1) ₹20
- (2) ₹10
- (3) ₹15

(4) ₹0

Answer: Option (3) - ₹15.

Explanation: A 40% discount on ₹500 is ₹200. Successive discounts of 30% and 10% are equivalent to $1 - (0.70 \times 0.90) = 37\%$, so the discount is ₹185. The difference is ₹200 - ₹185 = ₹15.

39. Prakash wants to go to the theatre. He starts from his home, which is in the east, and comes to a crossing. The road to the right ends at a university. Straight ahead is the hospital. In which direction is the theatre?

- (1) North
- (2) South
- (3) West
- (4) East

Answer: Option (2) - South.

Explanation: Since his home is east of the crossing, Prakash approaches the crossing while facing west. His right side is therefore north, where the university lies, and straight ahead is west, where the hospital lies. The remaining road to the left is south; hence the theatre is to the south.

40. Choose the word which comes third when the following words are arranged in dictionary order:

- (a) Continuous
- (b) Cauvery
- (c) Controversy
- (d) Casual
- (e) Control

- (1) Continuous
- (2) Cauvery
- (3) Controversy
- (4) Casual

Answer: Option (1) - Continuous.

Explanation: Dictionary order is determined letter by letter. Casual comes before Cauvery because 's' precedes 'u' after 'Ca'. Among the 'Con...' words, Continuous precedes Control and Controversy because 'i' comes before 't'. The order is Casual, Cauvery, Continuous, Control, Controversy; therefore the third word is Continuous.

41. The question contains statements followed by a conclusion. Choose the best conclusion which follows.

Statement I: Some persons are weak in Mathematics.

Statement II: All those who are weak in Mathematics are musicians.

Conclusion: Some musicians are weak in Mathematics.

- (1) Definitely true
- (2) Irrelevant
- (3) Probably true
- (4) Definitely false

Answer: Option (1) - Definitely true.

Explanation: Statement I guarantees the existence of at least some persons who are weak in Mathematics. Statement II places every such person within the class of musicians. Therefore, those existing persons are both musicians and weak in Mathematics, so the conclusion necessarily follows.

42. What was the day of the week on 14 August 2010?

- (1) Saturday
- (2) Monday
- (3) Sunday
- (4) Friday

Answer: Option (1) - Saturday.

Explanation: 1 January 2010 was a Friday. The number of days from 1 January to 14 August, excluding 1 January, is 225; $225 \bmod 7 = 1$. Moving one day forward from Friday gives Saturday. A calendar check also confirms 14 August 2010 was a Saturday.

43. Local trains leave a station at an interval of 20 minutes at a speed of 12 km/h. A man moving from the opposite side meets the trains at an interval of 12 minutes. The speed of the man is:

- (1) 4 km/h
- (2) 3 km/h
- (3) 5 km/h
- (4) 8 km/h

Answer: Option (4) - 8 km/h.

Explanation: In 20 minutes, successive trains are $12 \times (20/60) = 4$ km apart. Since the man meets them every 12 minutes, the relative speed is $4 \div (12/60) = 20$ km/h. As they move in opposite directions, relative speed = 12 + man's speed. Hence the man's speed is $20 - 12 = 8$ km/h.

44. Q, B, A, P, Y and R are in a row. Y and R are in the centre. Q and B are at the ends. P is sitting to the left of Q. Who is to the right of B?

- (1) A
- (2) Y
- (3) R
- (4) P

Answer: Option (1) - A.

Explanation: Y and R occupy the two central positions. Because P is immediately to the left of Q, Q must be at the right end and P next to it. B is therefore at the left end, leaving A in the seat immediately to B's right. The result depends on interpreting 'to the left of Q' as immediately to the left, which is the conventional intended reading here.

45. If in a certain code language 'HEART' is written as 'SVZIG', how will 'MIND' be written in that code?

- (1) RMNW
- (2) NRMW
- (3) WMRN

(4) MNRW

Answer: Option (2) - NRMW.

Explanation: The code uses the reverse-alphabet or Atbash substitution: A $\leftrightarrow$ Z, B $\leftrightarrow$ Y, C $\leftrightarrow$ X, and so on. Thus M $\rightarrow$ N, I $\rightarrow$ R, N $\rightarrow$ M and D $\rightarrow$ W, producing NRMW.

46. Match the newly re-elected Rajya Sabha members in List-I with their respective States in List-II:

List-I	List-II
(a) Mansingh Meraman Parmar	(i) Rajasthan
(b) Alka Singh	(ii) Maharashtra
(c) Tarun Chugh	(iii) Madhya Pradesh
(d) Rajendra Hiralal Jain	(iv) Gujarat

(1) a-i, b-ii, c-iii, d-iv

(2) a-i, b-iii, c-ii, d-iv

(3) a-iv, b-ii, c-iii, d-i

(4) a-iv, b-iii, c-ii, d-i

Answer: No correct code is printed in the options.

Explanation: The verified matching is Mansingh Meraman Parmar-Gujarat (iv), Alka Singh-Rajasthan (i), Tarun Chugh-Madhya Pradesh (iii), and Rajendra Hiralal Jain-Maharashtra (ii). This produces a-iv, b-i, c-iii, d-ii, which does not appear among the four printed codes. The question is therefore defective.

47. What is 'Aagaman'?

(1) India's first old-satellite disposal mission

(2) India's first private orbital rocket mission

(3) India's first star-study mission

(4) India's first deep-sea study mission

Answer: Option (2) - India's first private orbital rocket mission.

Explanation: Aagaman is associated with Skyroot Aerospace's planned private orbital launch mission. It represents the effort by an Indian private space company to place payloads into orbit using an indigenously developed launch vehicle, marking a major step in India's expanding private space ecosystem.

48. Expand JSJB 2.0.

(1) Jal Sanchay Jan Bhagidari 2.0

(2) Jan Sanchay Jal Bhagidari 2.0

(3) Jeevan Sanchay Jan Bhagidari 2.0

(4) Jal Sanchay Jeevan Bhagidari 2.0

Answer: Option (1) - Jal Sanchay Jan Bhagidari 2.0.

Explanation: JSJB stands for Jal Sanchay Jan Bhagidari. The initiative of the Ministry of Jal Shakti promotes community participation in water conservation, rainwater harvesting, groundwater recharge and the creation/reporting of water-storage structures. '2.0' denotes its expanded second phase.

49. What is the theme of the International Day of Cooperatives 2026?

- (1) Cooperatives build a better future for all
- (2) Cooperatives: partners for accelerated sustainable development
- (3) Cooperatives for a peaceful world
- (4) Sustainable consumption and production

Answer: Option (3) - Cooperatives for a peaceful world.

Explanation: The United Nations announced 'Cooperatives for a peaceful world' as the 2026 theme. It highlights how cooperative enterprises can strengthen democratic participation, social cohesion, inclusion, resilience and shared economic opportunity, thereby contributing to peaceful societies.

50. Which of the following statements is/are correct with respect to the Greater Bengaluru Authority (GBA)?

- (a) It was established on 15 May 2025, replacing the Bruhat Bengaluru Mahanagara Palike.
 - (b) The GBA oversees the entire Greater Bengaluru Urban Agglomeration.
 - (c) The Government of Karnataka enacted the Greater Bengaluru Governance Act, 2025, creating the GBA.
- (1) (a) and (b)
 - (2) (a), (b) and (c)
 - (3) (b) and (c)
 - (4) Only (c)

Answer: Intended answer: Option (2) - (a), (b) and (c); technical wording requires caution.

Explanation: The reform framework brought the GBA into operation in 2025 to coordinate and supervise governance and development across the Greater Bengaluru Area, with decentralised city corporations replacing the single-BBMP model. However, the principal statute's formal short title is the Greater Bengaluru Governance Act, 2024, although it is Karnataka Act No. 36 of 2025 and took effect in 2025. Thus the examination clearly intends all three statements, but statement (c) is technically imprecise in naming the principal Act as '2025'.

51. Recently, Sikkim was declared a fully literate State under which programme?

- (1) UTTAM
- (2) UTHSAH
- (3) ULLAS
- (4) UTKARSH

Answer: Option (3) - ULLAS.

Explanation: ULLAS stands for Understanding of Lifelong Learning for All in Society. It is the centrally sponsored adult-education programme aimed at foundational literacy and numeracy, critical life skills, vocational skills, basic education and continuing education for non-literate persons aged 15 years and above.

52. Expand SEHAT.

- (1) School Education for Health through Agricultural Transformation
- (2) Science Excellence for Humanity through Agricultural Transformation
- (3) Science Excellence for Health through Agricultural Transformation
- (4) Science Exhibition for Health through AYUSH Transformation

Answer: Option (3) - Science Excellence for Health through Agricultural Transformation.

Explanation: SEHAT expands to Science Excellence for Health through Agricultural Transformation. The title reflects an interdisciplinary approach linking agricultural research, nutrition, health outcomes and scientific innovation.

53. Pandit Deendayal Upadhyaya National Academy of Social Security was set up in 1990. It is the apex training institute of:

- (1) Institute of Secretariat Training and Management
- (2) Karnataka Skill Development Corporation
- (3) Department of Personnel and Training
- (4) Employees' Provident Fund Organisation

Answer: Option (4) - Employees' Provident Fund Organisation.

Explanation: The Pandit Deendayal Upadhyaya National Academy of Social Security is EPFO's apex training institution. It develops the professional capacity of officers and staff in social-security administration, provident fund law, compliance, finance, information systems and related areas.

54. General N.S. Raja Subramani assumed charge as the third Chief of Defence Staff (CDS) of the Indian Armed Forces on 31 May 2026. Who was the second Chief of Defence Staff?

- (1) General Anil Chauhan
- (2) General Bipin Rawat
- (3) General Upendra Dwivedi
- (4) General Manoj Pande

Answer: Option (1) - General Anil Chauhan.

Explanation: General Bipin Rawat was India's first CDS. General Anil Chauhan became the second CDS in September 2022 and served until May 2026. General N.S. Raja Subramani then assumed office as the third CDS on 31 May 2026.

55. In April 2026, the Vice-President of India, Shri C.P. Radhakrishnan, released the latest version of the Constitution of India in the Sindhi language. It was published in which two scripts?

- (a) Devanagari
- (b) Gurmukhi
- (c) Persian
- (d) Gujarati

- (1) (b) and (d)
- (2) (b) and (c)
- (3) (a) and (d)
- (4) (a) and (c)

Answer: Option (4) - Devanagari and Persian.

Explanation: The updated Sindhi-language Constitution was released in both Devanagari and Persian scripts. Sindhi has a multi-script tradition in India: Devanagari is used by many speakers, while a Perso-Arabic-derived script is historically widespread.

56. In which of the following situations is the duty of confidentiality breached by a government servant?

- (1) Information is shared with a relative without authorisation
- (2) Information is disclosed to a colleague on a need-to-know basis
- (3) Information is disclosed under the RTI framework
- (4) Disclosure is required by law

Answer: Option (1) - Information is shared with a relative without authorisation.

Explanation: Confidentiality permits official information to be accessed or disclosed only for an authorised public purpose. A colleague with a genuine need to know may receive it, and statutory disclosure under the RTI Act or another law is not an ethical breach. Sharing it privately with a relative without authority violates both purpose limitation and official trust.

57. The act of an employee or insider revealing information about wrongful, illegal or unethical activities within an organisation is called:

- (1) Whistleblowing
- (2) Windblowing
- (3) Whispering
- (4) Disciplining

Answer: Option (1) - Whistleblowing.

Explanation: Whistleblowing is the disclosure, through internal or external channels, of wrongdoing such as corruption, fraud, danger to the public, abuse of authority or serious ethical violations. Effective systems protect good-faith whistleblowers from retaliation while providing procedures to verify allegations.

58. In 1995, the Nolan Committee's foundational principles were widely integrated as moral guidelines into public services. The Nolan Principles are popularly known as:

- (1) Five Principles of Public Life
- (2) Nine Principles of Public Life
- (3) Seven Principles of Public Life
- (4) Eight Principles of Public Life

Answer: Option (3) - Seven Principles of Public Life.

Explanation: The Nolan Principles are selflessness, integrity, objectivity, accountability, openness, honesty and leadership. They provide a widely used ethical framework for holders of public office and public institutions.

59. As members of a secular, democratic State, the police should strive continuously to rise above which of the following factors?

- (1) High standard of discipline
- (2) Universal brotherhood
- (3) Personal prejudices
- (4) Harmony

Answer: Option (3) - Personal prejudices.

Explanation: Police authority must be exercised impartially and in accordance with law. Personal bias based on religion, caste, class, gender, language, region or other identity undermines equal protection, procedural fairness and public confidence. Discipline, harmony and universal brotherhood are positive values rather than factors to be overcome.

60. Ethical behaviour at the workplace promotes:

- (a) Manipulation
- (b) Suspicion among colleagues
- (c) Secrecy and competition
- (d) Trust and cooperation
- (e) Integrity

Choose the correct answer.

- (1) (a), (b) and (c)
- (2) (a), (b), (c), (d) and (e)
- (3) (c) and (e)
- (4) (d) and (e)

Answer: Option (4) - (d) and (e).

Explanation: Ethical conduct creates reliability, fairness and psychological safety, which support trust and cooperation. It also reinforces integrity by aligning actions with stated values and professional duties. Manipulation, suspicion and needless secrecy are consequences of unethical or poorly governed workplaces.

61. Which of the following statements are correct regarding the law-making procedure?

- (a) Article 100(1) explains that matters in Parliament are generally decided by a majority.
- (b) Under Article 107, a Money Bill can be introduced in both Houses of Parliament.
- (c) Even if Parliament is prorogued, a pending Bill remains alive.
- (d) A Bill becomes law merely after consideration by both Houses of Parliament.

- (1) (a), (c) and (d) are correct
- (2) (b) and (c) are correct
- (3) (a) and (d) are correct
- (4) (a) and (c) are correct

Answer: Option (4) - (a) and (c) are correct.

Explanation: Article 100(1) provides for decision by a majority of members present and voting, subject to constitutional exceptions. A Money Bill can be introduced only in the Lok Sabha, so (b) is false. Prorogation does not cause a pending Bill to lapse, so (c) is true. A Bill normally becomes law only after presidential assent, not merely after consideration by the Houses; hence (d) is false.

62. The members of the Union Public Service Commission are appointed by:

- (1) President of India
- (2) Prime Minister of India
- (3) Governor of a State
- (4) President of UPSC

Answer: Option (1) - President of India.

Explanation: Article 316 provides that the Chairman and other members of the UPSC are appointed by the President. Members of a State Public Service Commission are appointed by the Governor, while members of a Joint State Public Service Commission are appointed by the President.

63. Which of the following are included in the Seventh Schedule of the Constitution?

- (a) Union List
- (b) State List
- (c) Concurrent List
- (d) Official Languages of India

Select the correct answer.

- (1) (a) only
- (2) (a) and (b) only
- (3) (b) and (d) only
- (4) (a), (b) and (c)

Answer: Option (4) - (a), (b) and (c).

Explanation: The Seventh Schedule distributes legislative subjects through the Union List, State List and Concurrent List. The constitutionally recognised languages are listed in the Eighth Schedule, not the Seventh Schedule.

64. In a parliamentary government, the Executive is directly responsible to:

- (1) Judiciary
- (2) Legislature
- (3) People
- (4) Constitution

Answer: Option (2) - Legislature.

Explanation: In the parliamentary system, the Council of Ministers is collectively responsible to the popular House of the legislature. At the Union level, Article 75(3) makes the Council of Ministers collectively responsible to the Lok Sabha. The electorate exercises indirect political control through its representatives.

65. Which Part of the Indian Constitution contains the emergency provisions?

- (1) Part X
- (2) Part XII
- (3) Part XIV
- (4) Part XVIII

Answer: Option (4) - Part XVIII.

Explanation: Part XVIII, comprising Articles 352 to 360, contains provisions relating to National Emergency, President's Rule in States and Financial Emergency.

66. Which of the following statements regarding President's Rule imposed in a State under Article 356 is NOT correct?

- (1) President's Rule can be proclaimed when the State government cannot be carried on in accordance with the Constitution
- (2) It affects the Fundamental Rights of citizens
- (3) The resolution approving President's Rule can be passed by a simple majority of Parliament
- (4) The federal relationship of the affected State with the Union changes during its operation

Answer: Option (2) - It affects the Fundamental Rights of citizens.

Explanation: Article 356 alters the functioning of the State executive and legislature and expands Union control, but it does not by itself suspend Fundamental Rights. A proclamation must be approved by both Houses by a simple majority. Suspension of certain Fundamental Rights is associated with a National Emergency under Article 352 and related provisions, not ordinary President's Rule.

67. Who was the provisional President of the Constituent Assembly before Dr. Rajendra Prasad took over?

- (1) C. Rajagopalachari
- (2) B.N. Rau
- (3) Dr. B.R. Ambedkar
- (4) Dr. Sachchidananda Sinha

Answer: Option (4) - Dr. Sachchidananda Sinha.

Explanation: As the oldest member, Dr. Sachchidananda Sinha served as temporary Chairman/President at the Constituent Assembly's first meeting on 9 December 1946. Dr. Rajendra Prasad was elected permanent President on 11 December 1946.

68. Consider the following statements:

- (a) The Constitution of India itself defines its 'Basic Structure' in terms of federalism, secularism, Fundamental Rights and democracy.
- (b) The Constitution provides for judicial review to safeguard citizens' liberties and preserve the ideals on which the Constitution is based.

Choose the correct answer.

- (1) (a) only is correct
- (2) (b) only is correct
- (3) (a) and (b) are correct
- (4) Neither (a) nor (b) is correct

Answer: Option (2) - (b) only is correct.

Explanation: The phrase and exhaustive content of the 'basic structure' are not expressly defined in the constitutional text; the doctrine was developed by the Supreme Court, especially in Kesavananda Bharati. Judicial review, however, is embedded through provisions such as Articles 13, 32, 136, 226 and 227 and is itself recognised as part of the basic structure.

69. Match the following:

List-I	List-II
(a) Equality in public employment	(i) Article 29
(b) Minority/cultural rights	(ii) Article 21
(c) Right to personal liberty	(iii) Article 23
(d) Right against exploitation	(iv) Article 16

- (1) a-ii, b-iv, c-i, d-iii
- (2) a-iii, b-iv, c-ii, d-i
- (3) a-iv, b-i, c-ii, d-iii
- (4) a-i, b-ii, c-iv, d-iii

Answer: Option (3) - a-iv, b-i, c-ii, d-iii.

Explanation: Equality of opportunity in public employment is protected by Article 16. Article 29 protects cultural and educational interests, including minority interests. Article 21 protects life and personal liberty. Article 23 prohibits trafficking, begar and other forms of forced labour, forming part of the right against exploitation.

70. The President of the Union of India is elected by:

- (1) The Members of Parliament
- (2) The elected members of Parliament, the State Legislative Assemblies and the Legislative Assemblies of the Union Territories of Delhi and Puducherry
- (3) The Members of Legislative Councils
- (4) The members of local self-governments

Answer: Option (2).

Explanation: Under Article 54, the electoral college comprises elected members of both Houses of Parliament and elected members of the Legislative Assemblies of the States, including the National Capital Territory of Delhi and Puducherry. Nominated MPs, members of Legislative Councils and local-body members do not vote in the presidential election.

71. Which among the following Union Territories do not have representation in the Council of States (Rajya Sabha)?

- (1) Puducherry, Jammu and Kashmir, Ladakh
- (2) Andaman and Nicobar Islands, Delhi, Puducherry
- (3) Dadra and Nagar Haveli and Daman and Diu, Delhi, Lakshadweep
- (4) Chandigarh, Lakshadweep, Ladakh

Answer: Option (4) - Chandigarh, Lakshadweep and Ladakh.

Explanation: Delhi, Puducherry and Jammu and Kashmir have Rajya Sabha representation. Chandigarh, Lakshadweep and Ladakh are not allotted seats in the Council of States. The allocation is governed by the Fourth Schedule and relevant reorganisation laws.

72. The highest legal adviser to the Government of India is:

- (1) Solicitor General
- (2) Advocate General
- (3) Attorney General
- (4) Comptroller and Auditor General

Answer: Option (3) - Attorney General of India.

Explanation: Article 76 establishes the Attorney General as the highest law officer of the Union. The Attorney General advises the Government of India on legal matters and performs other legal duties assigned by the President. An Advocate General is the corresponding constitutional law officer for a State.

73. The Governor submits his or her resignation letter to:

- (1) The Chief Minister of the concerned State
- (2) The President
- (3) The Prime Minister
- (4) The Chief Justice of India

Answer: Option (2) - The President.

Explanation: Article 156(2) provides that a Governor may resign by writing addressed to the President. The Governor also holds office during the pleasure of the President.

74. As per Article 163 of the Constitution, the Council of Ministers aids and advises the:

- (1) Chief Minister
- (2) Governor of the State
- (3) Legislative Council
- (4) Legislative Assembly

Answer: Option (2) - Governor of the State.

Explanation: Article 163 establishes a Council of Ministers with the Chief Minister at its head to aid and advise the Governor, except in matters where the Constitution requires the Governor to act in discretion.

75. Identify the incorrect pairs regarding the Shad-Darshanas:

- (a) Nyaya - Gautama
- (b) Yoga - Jaimini
- (c) Sankhya - Kapila
- (d) Purva Mimamsa - Patanjali

- (1) (a) and (b)
- (2) (a) and (c)
- (3) (b) and (d)
- (4) (a) and (d)

Answer: Option (3) - (b) and (d).

Explanation: Nyaya is traditionally associated with Gautama and Sankhya with Kapila. Yoga is associated with Patanjali, not Jaimini. Purva Mimamsa is associated with Jaimini, not Patanjali. Therefore pairs (b) and (d) are incorrect.

76. Match the items in List-I (Significant Day) with List-II (Date) and choose the correct answer:

List-I (Significant Day)	List-II (Date)
(a) Earth Day	(i) 2 December
(b) World Ozone Day	(ii) 22 April
(c) National Pollution Prevention Day	(iii) 11 July
(d) World Population Day	(iv) 16 September

- (1) a-iv, b-iii, c-i, d-ii
- (2) a-iii, b-ii, c-iv, d-i
- (3) a-ii, b-iv, c-i, d-iii
- (4) a-ii, b-i, c-iii, d-iv

Answer: Option (3) - a-ii, b-iv, c-i, d-iii.

Explanation: Earth Day is observed on 22 April. World Ozone Day is observed on 16 September. India's National Pollution Control/Prevention Day is observed on 2 December in remembrance of the Bhopal gas tragedy. World Population Day is observed on 11 July.

77. The correct order of the Olympic motto is:

- (1) Faster, Stronger, Higher - Together
- (2) Higher, Faster, Stronger - Together
- (3) Faster, Higher, Stronger - Together
- (4) Higher, Stronger, Faster - Together

Answer: Option (3) - Faster, Higher, Stronger - Together.

Explanation: The traditional Latin motto is Citius, Altius, Fortius - Faster, Higher, Stronger. In 2021 the word Communitas, meaning Together, was added, producing 'Faster, Higher, Stronger - Together'.

78. The first Summer Paralympic Games were held in _____ in the year _____.

- (1) Atlanta, 1964
- (2) Rome, 1960
- (3) Toronto, 1960
- (4) Tokyo, 1964

Answer: Option (2) - Rome, 1960.

Explanation: The first official Paralympic Games were held in Rome in 1960, shortly after the Olympic Games. They evolved from the Stoke Mandeville Games initiated for athletes with spinal injuries and marked the beginning of the modern Paralympic movement.

79. Which one of the following pairs/groups of Human Development Index indicators is correct?

- (a) Health, Yoga and Happiness
 - (b) Health, Reading and Writing
 - (c) Health, Education and Standard of Living
 - (d) Health, Communication and Writing
- (1) (a) only
 - (2) (b) and (d) only
 - (3) (c) only
 - (4) (b) only

Answer: Option (3) - (c) only.

Explanation: The HDI combines three dimensions: a long and healthy life, knowledge/education, and a decent standard of living. These are measured through life expectancy, schooling indicators and gross national income per capita. Yoga, happiness and communication are not the three HDI dimensions.

80. Match the following Finance Commissions with their Chairpersons:

List-I (Finance Commission)	List-II (Chairperson)
(a) First	(i) K. Santhanam
(b) Second	(ii) Mahavir Tyagi
(c) Third	(iii) K.C. Neogy
(d) Fourth	(iv) Ashok Kumar Chanda
(e) Fifth	(v) P.V. Rajamannar

- (1) a-iii, b-i, c-iv, d-v, e-ii
- (2) a-iii, b-iv, c-i, d-v, e-ii
- (3) a-i, b-iii, c-v, d-ii, e-iv
- (4) a-iv, b-iii, c-i, d-v, e-ii

Answer: Option (1) - a-iii, b-i, c-iv, d-v, e-ii.

Explanation: The First Finance Commission was chaired by K.C. Neogy; the Second by K. Santhanam; the Third by Ashok Kumar Chanda; the Fourth by P.V. Rajamannar; and the Fifth by Mahavir Tyagi. This yields a-iii, b-i, c-iv, d-v, e-ii.

81. The reason for Turner syndrome is:

- (1) Number of chromosomes becoming 48
- (2) Number of chromosomes becoming 46
- (3) Number of chromosomes becoming 47 due to one extra chromosome in the 21st pair
- (4) Number of chromosomes becoming 47 due to one extra X chromosome

Answer: No correct option - Turner syndrome is usually 45,X (monosomy X).

Explanation: Turner syndrome results when a female has only one complete X chromosome, classically written 45,X, although mosaic forms also occur. Option (3) describes trisomy 21 (Down syndrome), while option (4) resembles an extra-X condition rather than Turner syndrome. The printed question contains no correct answer.

82. Which of the following microbes/algae is used by astronauts?

- (1) Gelidium
- (2) Spirulina
- (3) Gracilaria
- (4) Spirogyra

Answer: Option (2) - Spirulina.

Explanation: Spirulina is a nutrient-rich cyanobacterium containing substantial protein, vitamins and minerals. It has been studied and used as a compact food supplement for space missions and is also investigated for closed life-support systems because it can produce biomass efficiently.

83. The Minamata Convention is a global UN treaty adopted in 2013 to protect human health and the environment from anthropogenic _____ pollution.

- (1) Mercury
- (2) Carbon monoxide
- (3) Sulphur dioxide
- (4) Nitrogen oxides

Answer: Option (1) - Mercury.

Explanation: The Minamata Convention on Mercury controls the supply, trade, use, emissions and releases of mercury and mercury compounds. It is named after Minamata, Japan, where industrial methylmercury contamination caused severe neurological disease.

84. Identify the reasons behind shifting from diesel and petrol to Compressed Natural Gas (CNG):

- (a) It burns more efficiently.
- (b) It is cheaper.
- (c) Laying pipelines to ensure continuous and uninterrupted supply of CNG is easy.
- (d) Adulteration and siphoning-off are difficult.

- (1) (a), (c) and (d) only
- (2) (a), (b) and (d) only
- (3) (b), (c) and (d) only
- (4) (c), (b) and (a) only

Answer: Option (2) - (a), (b) and (d) only.

Explanation: CNG generally burns more cleanly and efficiently than petrol or diesel and can be cheaper per unit of useful energy. Because it is supplied and stored as a gas under pressure, adulteration and conventional siphoning are more difficult. Creating a continuous pipeline and filling-station network is not easy; infrastructure requirements are a major constraint. Therefore statement (c) is false.

85. Fish oil is rich in:

- (1) Vitamins
- (2) Carbohydrates
- (3) Omega-3 fatty acids
- (4) Oligosaccharides

Answer: Option (3) - Omega-3 fatty acids.

Explanation: Fish oil is a major dietary source of the long-chain omega-3 fatty acids EPA and DHA. These lipids are important components of cell membranes and are associated with cardiovascular, neurological and anti-inflammatory functions.

86. Which of the following groups is an example of modified leaves?

- (1) Onion and cactus
- (2) Pea and ginger
- (3) Onion and garlic
- (4) Garlic and cactus

Answer: Expected answer: Option (3) - Onion and garlic; the item is ambiguous.

Explanation: Onion and garlic bulbs contain fleshy scale leaves that store food, making option (3) the standard textbook answer. However, cactus spines are also modified leaves, and pea tendrils are leaf modifications, while ginger is a modified stem. Because options (1) and (4) include one valid leaf modification each, the wording 'group is an example' should ideally specify that both members must exemplify the same storage-leaf modification.

87. Malfunctioning of kidneys can lead to accumulation of urea in the blood. This condition is called:

- (1) Haemodialysis
- (2) Uremia
- (3) Renal calculi
- (4) Nephritis

Answer: Option (2) - Uremia.

Explanation: Uremia is the clinical state caused by retention of urea and other nitrogenous wastes when renal filtration fails. Haemodialysis is a treatment, renal calculi are kidney stones, and nephritis is inflammation of kidney tissue.

88. In gel electrophoresis, DNA moves towards the:

- (1) Negative electrode
- (2) Positive electrode
- (3) Neutral point
- (4) Random direction

Answer: Option (2) - Positive electrode.

Explanation: DNA has a negatively charged phosphate backbone. When an electric field is applied, DNA fragments migrate through the gel toward the positive electrode, or anode. Smaller fragments usually move faster and farther through the gel matrix than larger fragments.

89. Match the following planets with their approximate periods of revolution:

List-I (Planet)	List-II (Period of revolution)
(a) Jupiter	(i) 84 years
(b) Saturn	(ii) 12 years
(c) Uranus	(iii) 165 years
(d) Neptune	(iv) 29 years

- (1) a-iv, b-i, c-iii, d-ii
- (2) a-iii, b-ii, c-iv, d-i
- (3) a-i, b-iii, c-iv, d-ii
- (4) a-ii, b-iv, c-i, d-iii

Answer: Option (4) - a-ii, b-iv, c-i, d-iii.

Explanation: Jupiter takes about 12 Earth years to orbit the Sun, Saturn about 29 years, Uranus about 84 years and Neptune about 165 years. Thus the correct code is a-ii, b-iv, c-i, d-iii.

90. Consider the following statements:

Statement I: A fuse protects circuits and appliances by stopping the flow of an unduly high electric current.

Statement II: The fuse is placed in parallel with the device.

- (1) Both Statements I and II are correct
- (2) Both Statements I and II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Answer: Option (3) - Statement I is correct but Statement II is incorrect.

Explanation: A fuse contains a low-melting-point element that heats and melts when current exceeds a safe value, opening the circuit. It must be connected in series so that all current to the appliance passes through it. A parallel fuse would not reliably interrupt the appliance current.

91. GPS-Aided GEO Augmented Navigation (GAGAN) is a Satellite-Based Augmentation System developed jointly by:

- (1) ISRO and DRDO
- (2) DRDO and AAI
- (3) AAI and HAL
- (4) ISRO and AAI

Answer: Option (4) - ISRO and Airports Authority of India (AAI).

Explanation: GAGAN was jointly developed by ISRO and AAI to improve the accuracy, integrity and availability of satellite navigation signals for civil aviation and other users in the Indian region. It uses ground stations and geostationary satellites to broadcast correction and integrity information.

92. An alloy is used in the coil of an electric iron box. The reason is:

- (1) The resistivity of an alloy is higher than that of its constituent metals
- (2) The resistance of an alloy is higher than that of its constituent metals
- (3) The resistivity of an alloy is lower than that of its constituent metals
- (4) Alloys oxidise readily at high temperature

Answer: Option (1) - The resistivity of an alloy is higher than that of its constituent metals.

Explanation: Heating elements use alloys such as nichrome because their resistivity is high, allowing a practical length of wire to generate substantial heat. They also have high melting points and resist oxidation at operating temperatures. Resistance depends on dimensions as well as material, so resistivity is the correct material property.

93. Suresh consumes curd that has been kept in a copper vessel for three days and later experiences stomach pain. One possible reason is:

- (1) Water in the curd
- (2) Sweetness in the curd
- (3) Salt in the curd
- (4) Reaction of curd with copper

Answer: Option (4) - Reaction of curd with copper.

Explanation: Curd is acidic because it contains lactic acid. Prolonged contact with copper can lead to reaction and the formation/leaching of copper salts, which may contaminate the food and cause gastrointestinal discomfort. Acidic foods should therefore not be stored for long periods in unlined copper vessels.

94. Consider the following statements and choose the correct answer:

Statement I: Acids are bitter in taste.

Statement II: Bases are sour in taste.

- (1) Both Statements I and II are incorrect
- (2) Statement I is correct but Statement II is incorrect
- (3) Statement I is incorrect but Statement II is correct
- (4) Both Statements I and II are correct

Answer: Option (1) - Both statements are incorrect.

Explanation: Acids characteristically taste sour, while bases are generally bitter and feel slippery. Accordingly, each statement reverses the usual property and both are incorrect.

95. Match the following alloys with their names:

List-I	List-II
(a) Cu + Zn	(i) Solder
(b) Cu + Sn	(ii) Brass
(c) Pb + Sn	(iii) Amalgam
(d) Na + Hg	(iv) Bronze

- (1) a-ii, b-iv, c-i, d-iii
- (2) a-i, b-iv, c-ii, d-iii
- (3) a-ii, b-iii, c-i, d-iv
- (4) a-i, b-ii, c-iii, d-iv

Answer: Option (1) - a-ii, b-iv, c-i, d-iii.

Explanation: Copper and zinc form brass. Copper and tin form bronze. Lead and tin form solder. Sodium with mercury forms an amalgam; more generally, an amalgam is an alloy of mercury with another metal. Thus a-ii, b-iv, c-i, d-iii is correct.

96. The gases used in television tubes and lighthouses are:

- (1) Oxygen and hydrogen
- (2) Nitrogen and carbon dioxide
- (3) Krypton and xenon
- (4) Methane and helium

Answer: Option (3) - Krypton and xenon.

Explanation: Krypton and xenon are noble gases used in specialised lamps and discharge tubes because they are chemically inert and emit characteristic bright light when electrically excited. Xenon is especially useful in high-intensity arc and flash lamps, while krypton is used in certain efficient lighting applications.

97. Danger lights are red because red light is _____ by fog or smoke.

- (1) Most scattered
- (2) Least scattered
- (3) Most diffracted
- (4) Least diffracted

Answer: Option (2) - Least scattered.

Explanation: Rayleigh scattering varies approximately as the inverse fourth power of wavelength. Red light has a longer wavelength than most visible colours, so it is scattered less by small particles and remains visible over a greater distance through haze, fog or smoke.

98. Choose the compound that can be used to clean wells and ponds containing organic debris.

- (1) Potassium dichromate
- (2) Potassium permanganate
- (3) Potassium chloride
- (4) Potassium sulphate

Answer: Option (2) - Potassium permanganate.

Explanation: Potassium permanganate is a strong oxidising agent. In controlled water-treatment use it oxidises organic matter, reduces odour and colour, and helps control certain microorganisms and dissolved iron or manganese. Dosage must be carefully managed because excessive amounts are harmful.

99. Match List-I with List-II and choose the correct answer:

List-I (Instruments)	List-II (Uses)
(a) Planimeter	(i) To trace, enlarge or reduce maps
(b) Pantograph	(ii) To measure area
(c) Barometer	(iii) To measure atmospheric pressure
(d) Thermometer	(iv) To measure temperature

- (1) a-ii, b-i, c-iii, d-iv
- (2) a-i, b-ii, c-iii, d-iv
- (3) a-iii, b-i, c-ii, d-iv
- (4) a-iii, b-ii, c-i, d-iv

Answer: Option (1) - a-ii, b-i, c-iii, d-iv.

Explanation: A planimeter measures the area of an irregular plane figure. A pantograph traces a figure and can enlarge or reduce it. A barometer measures atmospheric pressure, and a thermometer measures temperature. Therefore the correct code is a-ii, b-i, c-iii, d-iv.

100. Choose the correct descending sequence of some important peaks/hills in Karnataka according to their height.

- (1) Chamundi Hills, Biligirirangana Hills, Gopalaswamy Hills, Melukote Hills
- (2) Biligirirangana Hills, Gopalaswamy Hills, Melukote Hills, Chamundi Hills
- (3) Gopalaswamy Hills, Melukote Hills, Biligirirangana Hills, Chamundi Hills
- (4) Melukote Hills, Chamundi Hills, Biligirirangana Hills, Gopalaswamy Hills

Answer: Option (2) - Biligirirangana Hills, Gopalswamy Hills, Melukote Hills, Chamundi Hills.

Explanation: Among the listed uplands, the Biligirirangana hill system reaches the greatest elevation. Himavad Gopalswamy Betta is next, followed by the Melukote hills, while Chamundi Hill is lower than the other listed peaks. Thus the descending order is Biligirirangana-Gopalswamy-Melukote-Chamundi.

INFINITE IAS KAS