NEXT IAS

AANKALAN-I : 2026

GENERAL STUDIES-I

Answer Key

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

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AANKALAN-I : 2026
GENERAL STUDIES-I

1. (a)

Lakshmikarna was a prominent ruler of the Kalachuri dynasty of Tripuri in central India. He ruled in the 11th century and is known for his extensive military campaigns. Hence, Pair 1 is correctly matched.

Harsha of Kashmir, also known as Harsha of the Lohara dynasty, ruled Kashmir during the late 11th and early 12th centuries. He did not belong to the Karkota dynasty. The Karkota dynasty was represented by rulers such as Lalitaditya Muktapida. Hence, Pair 2 is incorrectly matched.

Dandi Mahadevi was a ruling queen of the Bhauma-Kara dynasty of Odisha. Her reign illustrates the significant role played by women rulers in the political history of early medieval Odisha. Hence, Pair 3 is correctly matched.

Lalitaditya Muktapida was a powerful ruler of the Karkota dynasty of Kashmir, not the Utpala dynasty. The Utpala dynasty succeeded the Karkotas in Kashmir. Hence, Pair 4 is incorrectly matched.

2. (b)

Statement 1 is incorrect because the Brihadeeshwara Temple at Thanjavur was constructed during the reign of Rajaraja I (985–1014 CE) and was completed around 1010 CE. There are idols of 'Dwarpals' around the main shrine. The gigantic 'Nandi' (carved out of single rock) is situated in the exterior of sacrarium.

Statement 2 is correct. Rajaraja I attacked Trivandrum (Kandalur Salai) in the 10th century and destroyed the Chera (Cher) fleet. This achievement is mentioned in his inscriptions as "Kāndalūr śālai kalam-arutta".

3. (a)

The events can be arranged chronologically by remembering the major stages in Shivaji's struggle against the Adil Shahi Sultanate and the Mughal Empire, followed by his formal establishment as a sovereign ruler.

Conflict with Afzal Khan — 1659:

Afzal Khan, a prominent general of the Bijapur Sultanate, was sent to suppress Shivaji's growing power. The two met at Pratapgad in November 1659. Shivaji killed Afzal Khan during the encounter, after which the Marathas defeated the Bijapur forces in the surrounding region. This significantly strengthened Shivaji's position in the western Deccan.

Struggle against Shaista Khan — 1660–1663:

Shaista Khan, the Mughal governor of the Deccan and maternal uncle of Emperor Aurangzeb, was appointed to check Shivaji's expansion. He occupied Pune and established his headquarters at Lal Mahal. In April 1663, Shivaji launched a surprise attack on Shaista Khan at Pune. Shaista Khan escaped but was wounded and lost some of his fingers. Aurangzeb subsequently transferred him from the Deccan.

Treaty of Purandar — 1665:

Aurangzeb sent Mirza Raja Jai Singh I to deal with Shivaji. After the Mughal siege of Purandar and negotiations, the Treaty of Purandar was concluded in June 1665. Shivaji agreed to surrender a number of forts to the Mughals and accepted certain terms concerning his relations with the Mughal Empire. The treaty temporarily reduced the conflict between Shivaji and the Mughals.

Coronation of Shivaji — 1674:

After consolidating his territories and establishing an independent political authority, Shivaji was formally crowned at Raigad on 6 June 1674. He assumed the title Chhatrapati, marking the formal assertion of Maratha sovereignty.

4. (b)

The Ryotwari System was one of the three major land revenue systems introduced by the British in India, the other two being the Permanent Settlement and the Mahalwari System. Its distinctive feature was the direct settlement of land revenue between the government and the individual cultivator or ryot.

Statement 1 is incorrect. Holt Mackenzie was associated with the development of the Mahalwari System, not the Ryotwari System. The Ryotwari System was initially experimented with by Alexander Read in the Baramahal region and was subsequently developed and implemented on a wider scale by Thomas Munro in the Madras Presidency.

Statement 2 is correct. The Ryotwari System was mainly implemented in the Madras and Bombay Presidencies. It was also extended to certain other areas, including parts of Assam and Coorg. Unlike the Permanent Settlement, where the government dealt with zamindars, the Ryotwari arrangement established a direct relationship between the government and the cultivator.

Statement 3 is incorrect. The ryot was recognized as the proprietor of the holding, subject to payment of land revenue. Therefore, the ryot could sell, mortgage or otherwise transfer the land. The statement incorrectly says that the ryot could neither sell nor mortgage the land.

Statement 4 is correct. The land revenue demand under the Ryotwari System was not permanently fixed. It was periodically reassessed, with the settlement commonly being revised after about 30 years.

5. (d)

End of the First Round Table Conference — The First Round Table Conference was held in London from 12 November 1930 to 19 January 1931. It was convened by the British Government under Prime Minister Ramsay MacDonald to discuss constitutional reforms for India. The Indian National Congress did not participate in this conference because many of its leaders were imprisoned during the Civil Disobedience Movement. The conference concluded without reaching a settlement on the major constitutional questions.

Supreme sacrifice of Chandrashekhar Azad —On 27 February 1931, Chandrashekhar Azad was surrounded by British police at Alfred Park, Allahabad (now Chandrashekhar Azad Park). After a gun battle, he died by using his last bullet rather than being captured alive. This event occurred shortly after the conclusion of the First Round Table Conference and before the Gandhi-Irwin Pact.

Gandhi-Irwin Pact — The Gandhi-Irwin Pact was signed on 5 March 1931 between Mahatma Gandhi and Lord Irwin, the Viceroy of India. Under the agreement, the Congress agreed to suspend the Civil Disobedience Movement and participate in the Second Round Table Conference. The government agreed, among other things, to release political prisoners who had not been convicted of violence and permit peaceful picketing of liquor and foreign-cloth shops.

Karachi Session of the Indian National Congress — The Karachi Session was held from 26 to 29 March 1931, under the presidency of Vallabhbhai Patel. It endorsed the Gandhi-Irwin Pact and adopted two historically important resolutions concerning Fundamental Rights and the National Economic Programme. The session also expressed grief over the execution of Bhagat Singh, Shivaram Rajguru and Sukhdev shortly before the session.

6. (d)

Balu – Haryana: Balu is an important Harappan site located in Kaithal district of Haryana. Archaeological evidence from the site indicates the presence of the Harappan cultural tradition in the Ghaggar-Hakra region. Finds include pottery, terracotta objects and evidence of agricultural activity.

Padri – Gujarat: Padri is located in Bhavnagar district of Gujarat, in the Saurashtra region. It represents the Harappan cultural presence in coastal Gujarat. The site is important for understanding the settlement and economic activities of Harappan communities in the region.

Mandi – Uttar Pradesh: Mandi is an archaeological site in Muzaffarnagar district of Uttar Pradesh. It is associated with the Harappan cultural tradition and is particularly significant for evidence of Harappan material culture in the upper Ganga-Yamuna region.

Manda – Jammu and Kashmir: Manda is located near Akhnoor on the Chenab River in Jammu and Kashmir. It is considered the northernmost Harappan site in the Indian subcontinent. Its location demonstrates the extensive geographical spread of the Harappan Civilization towards the north.

7. (c)

The Yajurveda is primarily concerned with sacrificial rituals and contains the mantras used by the Adhvaryu priest during the performance of Vedic sacrifices. Its textual tradition is broadly divided into the Shukla Yajurveda (White Yajurveda) and the Krishna Yajurveda (Black Yajurveda).

Statement 1 is correct. The Vajasneyi Samhita is the Samhita of the Shukla Yajurveda. The term Vajasaneyi is associated with Yajnavalkya and the tradition of the White Yajurveda. The two principal recensions of the Vajasneyi Samhita are the Madhyandina and Kanva recensions.

Statement 2 is incorrect. The statement reverses an important distinction between the two traditions. The Shukla Yajurveda presents its Samhita mainly as an organised collection of mantras in verse and prose passages, while its principal Brahmana, the Shatapatha Brahmana, is preserved separately. In contrast, the Krishna Yajurveda has the characteristic feature of combining mantras and explanatory Brahmana-like prose within the Samhita itself. Therefore, it is the Krishna Yajurveda that is particularly distinguished by the intermingling of poetic and prose material within its Samhita.

Statement 3 is correct. The Shatapatha Brahmana contains important material relating to Vedic ritual, mythology and early geographical and cultural traditions. It discusses the Purushamedha, a highly elaborate Vedic sacrificial ritual. It also narrates the story of Videgha Madhava, associated with the eastward movement of Vedic culture. Videgha Madhava is described as being accompanied by his priest Gautama Rahugana. The account is significant for understanding the traditional association of the Videha region with the expansion of Vedic culture towards eastern India.

Statement 4 is incorrect. The Shatapatha Brahmana is not a poetic Samhita and does not consist exclusively of sacrificial hymns. It is a Brahmana text, predominantly composed in prose, and explains Vedic sacrifices, ritual procedures, their symbolism, mythology and associated traditions. It is one of the most extensive Brahmana texts and is particularly associated with the Shukla Yajurveda.

8. (d)

Mahendravarman I was one of the prominent early Pallava rulers and reigned approximately from c. 600–630 CE. He was a patron of art and architecture and is associated with the early development of Pallava rock-cut architecture. His reign also witnessed conflicts with the Chalukya ruler Pulakeshin II.

Narasimhavarman I succeeded Mahendravarman I and ruled approximately from c. 630–668 CE. Known by the title Mamalla, he defeated the Chalukya ruler Pulakeshin II and captured Vatapi around 642 CE. The port city of Mamallapuram is traditionally associated with his reign.

Parameshvaravarman I succeeded Narasimhavarman I and ruled approximately from c. 670–695 CE. His reign was marked by continued conflict with the Chalukyas, particularly under Vikramaditya I.

Nandivarman II, also known as Pallavamalla, belonged to a collateral branch of the Pallava family and ruled approximately from c. 731–796 CE. He is particularly associated with the Vaikuntha Perumal Temple at Kanchipuram

9. (a)

Women's Indian Association – 1917:

The Women's Indian Association (WIA) was established in 1917 at Adyar, Madras (now Chennai) by Annie Besant, Margaret Cousins and Dorothy Jinarajadasa, among others. It was one of the earliest organised women's associations in India. The organisation worked for women's education, social reform, political rights and women's suffrage. It also advocated greater participation of women in public and political life.

National Council of Women in India – 1925:

The National Council of Women in India (NCWI) was established in 1925 as an Indian branch associated with the International Council of Women. It provided an organised platform for women's issues and worked towards social reform, education, women's welfare and improvement in the legal and social status of women. It represented an important phase in the institutional development of the women's movement in India.

Bharat Stree Mahamandal – 1910:

The Bharat Stree Mahamandal was founded in 1910 by Sarala Devi Chaudhurani. It aimed to promote the education and advancement of women, particularly by establishing educational institutions and encouraging

women's participation in social life. It is significant because it represented an early organised, Indian-led women's movement before the major expansion of women's political organisations in the 1910s and 1920s.

All India Women's Conference – 1927:

The All India Women's Conference (AIWC) was founded in 1927, with Margaret Cousins playing a prominent role in its formation. Initially, its major emphasis was on women's education, but its activities subsequently expanded to include social reform, women's legal rights, child welfare and political participation. It became one of the major organisations associated with the women's movement in colonial India.

10. (d)

The Battle of Daurah was fought in 1532 during the reign of Humayun. Humayun fought against the Afghan forces led by Mahmud Lodi and defeated them. This battle preceded Humayun's later conflicts with Sher Shah Suri.

The Battle of Chausa was fought in 1539 between Humayun and Sher Shah Suri. Humayun suffered a decisive defeat, which greatly strengthened Sher Shah's position and paved the way for his eventual establishment of the Sur Empire.

The Battle of Kannauj, also known as the Battle of Bilgram, was fought in 1540. Sher Shah Suri decisively defeated Humayun, forcing him to leave India. Sher Shah subsequently consolidated his control over northern India.

The Battle of Tukaroi was fought in 1575 between the Mughal forces under Munim Khan and the Bengal Sultanate under Daud Khan Karrani. The Mughal victory brought Bengal substantially under Mughal control, although the final settlement followed through the Treaty of Katak.

The Battle of Deorai was fought in 1659 near Ajmer during the Mughal war of succession. Aurangzeb defeated Dara Shikoh, contributing to Aurangzeb's consolidation of power as Mughal emperor.

11. (a)

Evolution of the Indian Civil Service (ICS)

The evolution of the Indian Civil Service (ICS) marked the gradual transition from the East India Company's patronage-based recruitment to a system based on open competition and merit.

Before 1853, recruitment to the higher civil services was largely based on patronage. The Company's Directors nominated candidates, who were trained in Britain, particularly at Haileybury College, before serving in India.

The Charter Act of 1853 introduced the principle of open competitive recruitment, weakening the earlier patronage system. The Macaulay Committee of 1854 recommended competitive examination as the basis for recruitment, while the Civil Service Commission was established in London in 1854. The first competitive examination was held in 1855 in London.

For Indians, the London-based examination remained a major barrier because of the cost and difficulty of travelling to Britain. Satyendranath Tagore became the first Indian to qualify for the ICS examination in 1863 and entered service in 1864.

Indian leaders continued to demand that the examination be conducted in India. Following the Government of India Act, 1919, the ICS examination began to be held in India from 1922, initially at Allahabad and subsequently at Delhi, while London continued as a centre.

The Lee Commission (1923) further examined the issue of Indianisation of the higher services. By 1941, Indians had become numerically greater than Europeans in the ICS, reflecting the gradual Indianisation of the service.

Complete chronology for Prelims

1793 → Cornwallis Code → foundation of organised civil service

1853 → Charter Act → open competitive recruitment accepted

1854 → Macaulay Committee + Civil Service Commission in London

1855 → competitive examination begins

1864 → Satyendranath Tagore becomes first Indian to qualify

1919 → Government of India Act → further basis for Indianisation

1922 → ICS examination begins in India, first at Allahabad, later Delhi

1923 → Lee Commission appointed

1926 → Public Service Commission established in India

1941 → Indians become numerically predominant over Europeans in ICS

12. (a)

Objectives Resolution was adopted — 22 January 1947: Jawaharlal Nehru moved the Objectives Resolution on 13 December 1946, and the Constituent Assembly adopted it on 22 January 1947. It later provided the philosophical basis for the Constitution.

National Flag was adopted — 22 July 1947: The Constituent Assembly adopted the Tricolour as the National Flag on 22 July 1947, shortly before independence.

Drafting Committee was appointed — 29 August 1947: The Constituent Assembly appointed the Drafting Committee, with Dr. B. R. Ambedkar as its Chairman, on 29 August 1947.

Constitution was adopted — 26 November 1949: The Constituent Assembly formally adopted, enacted and gave to ourselves the Constitution of India on 26 November 1949. It came into force later, on 26 January 1950.

13. (c)

Article 19(1) guarantees certain freedoms exclusively to citizens of India. The rights mentioned in the question correspond to different sub-clauses of Article 19(1).

Pair 1 is incorrect. Article 19(1)(b) guarantees the right to assemble peaceably and without arms. The right to form associations or unions or co-operative societies is provided under Article 19(1)(c).

Pair 2 is incorrect. Article 19(1)(c) guarantees the right to form associations or unions or co-operative societies. The right to assemble peaceably and without arms belongs to Article 19(1)(b).

Pair 3 is correct. Article 19(1)(d) guarantees citizens the right to move freely throughout the territory of India.

Pair 4 is correct. Article 19(1)(e) guarantees citizens the right to reside and settle in any part of the territory of India.

14. (b)

Statement 1 is incorrect. Article 54 deals with the Electoral College for the election of the President, specifying the members who participate in the election. It does not deal with the manner of election.

Statement 2 is incorrect. Article 55 deals with the manner of election of the President. It provides for proportional representation by means of the single transferable vote and voting by secret ballot. It also lays down the method for determining the value of votes.

Statement 3 is correct. Members of the Electoral College are not bound by a party whip in the presidential election. The election is conducted through a secret ballot, allowing an elector to exercise their vote according to their choice.

Statement 4 is correct. NOTA is not applicable to the election of the President. The presidential election is conducted through the system of proportional representation by means of the single transferable vote, and there is no NOTA option.

15. (c)

- Rajasthan and Andhra Pradesh each have 25 Lok Sabha seats.
- Gujarat has 26 seats, whereas Karnataka has 28 seats. Therefore, they do not have the same representation.
- Jharkhand has 14 seats, while Chhattisgarh has 11 seats. Hence, this pair is also not correctly matched.
- Assam and Jharkhand each have 14 Lok Sabha seats.



16. (b)

The Sadiq Ali Committee was constituted in Rajasthan in 1964 to review the working of Panchayati Raj institutions in the state.

The Ashok Mehta Committee was appointed in 1977 to review the Panchayati Raj system in India. It submitted its report in 1978 and recommended a two-tier structure of Zila Parishad and Mandal Panchayat.

The L. M. Singhvi Committee was constituted in 1986 to examine the revitalisation of Panchayati Raj institutions. It recommended constitutional recognition for Panchayati Raj institutions.

The P. K. Thungon Committee was constituted in 1988 and recommended constitutional status and regular elections for local bodies.

17. (b)

Statement 1 is correct.

Under Article 148(1), the CAG can be removed from office only in the same manner and on the same grounds as a Judge of the Supreme Court. The removal requires an address by both Houses of Parliament, supported by the required special majority, on the ground of proved misbehaviour or incapacity.

Statement 2 is incorrect.

Under Article 148(4), the CAG shall not be eligible for further office either under the Government of India or under the Government of any State after demitting office. Therefore, the statement that the CAG is "not ineligible" for further office is incorrect.

Statement 3 is correct.

Under Article 151, reports of the CAG relating to the accounts of the Union are submitted to the President, who causes them to be laid before both Houses of Parliament. These reports are subsequently examined by the Public Accounts Committee (PAC).

Statement 4 is incorrect.

The CAG is not responsible for compiling and maintaining the accounts of the Central Government. Following the separation of accounting from audit in 1976, the responsibility for compiling and maintaining Union Government accounts rests with the Controller General of Accounts (CGA) under the Ministry of Finance. The CAG primarily performs the audit function.

18. (c)

The key is to distinguish previous Presidential sanction, reservation of a Bill, and mandatory reservation.

Statement 1 is incorrect. A State Bill giving effect to certain Directive Principles of State Policy does not automatically have to be reserved for the President. The Constitution does not prescribe that every Bill merely intended to implement Directive Principles must necessarily be reserved.

Statement 2 is incorrect. Article 304(b) requires the previous sanction of the President before a Bill imposing reasonable restrictions on trade, commerce or intercourse is introduced or moved in the State Legislature. This is a requirement before introduction, not a rule that the Bill must subsequently be reserved for the President. Therefore, the statement does not describe mandatory reservation.

Statement 3 is correct. Article 288(2) expressly provides that a State law imposing the specified tax on water or electricity shall have no effect unless it has been reserved for the consideration of the President and has received the President's assent. Thus, both reservation and Presidential assent are constitutionally necessary.

Statement 4 is incorrect. Article 254(2) deals with a State law on a Concurrent List matter that is repugnant to a Parliamentary law. If such a State law is reserved for the President and receives Presidential assent, it can prevail in that State. Thus, reservation is the constitutional route for giving the State law overriding effect, rather than every such Bill being described as mandatorily reserved merely because it is repugnant.

19. (a)

Karnataka, then known as Mysore State, was formed on 1 November 1956 following the States Reorganisation Act, 1956. It was renamed Karnataka in 1973.

Gujarat was formed on 1 May 1960 after the bifurcation of the erstwhile Bombay State.

Nagaland became a separate State on 1 December 1963, becoming the 16th State of India.

The present State of Punjab was created on 1 November 1966 under the Punjab Reorganisation Act, 1966.

20. (b)

Statement 1 is incorrect. The Constitution does define a Money Bill. Article 110 specifies when a Bill is considered a Money Bill and enumerates the matters that may be included in it. Therefore, the statement that the Constitution does not define a Money Bill is incorrect.

Statement 2 is correct. Under Article 109, a Money Bill can be introduced only in the Lok Sabha. Further, under Article 117(1), a Money Bill cannot be introduced except on the recommendation of the President. In parliamentary practice, it is introduced by a Minister.

Statement 3 is correct. Under Article 110(4), when a Money Bill is transmitted to the Rajya Sabha and when it is presented to the President for assent, it must bear the Speaker of the Lok Sabha's certificate stating that it is a Money Bill.

21. (d)



The Bosphorus Strait is located in Türkiye and connects the Black Sea with the Sea of Marmara. It is an important maritime passage linking the Black Sea to the Mediterranean region through the Sea of Marmara and the Dardanelles. Since the Bosphorus does not connect the Aegean Sea directly with the Sea of Marmara, Pair 1 is incorrectly matched.

The Dardanelles Strait is situated in northwestern Türkiye and connects the Sea of Marmara with the Aegean Sea. It forms part of the maritime route between the Black Sea and the Mediterranean Sea. Since the Dardanelles does not directly connect the Sea of Marmara with the Black Sea, Pair 2 is incorrectly matched.

The Strait of Kerch connects the Black Sea with the Sea of Azov. It lies between the Kerch Peninsula and the Taman Peninsula and provides the only natural maritime passage between these two seas. Therefore, Pair 3 is correctly matched.

22. (a)

Statement 1 is correct. The ionosphere is an electrically charged region of the upper atmosphere containing free ions and electrons. These charged particles influence the propagation of radio waves and can reflect or

refract medium-frequency and high-frequency radio waves back towards the Earth, making long-distance radio communication possible.

Statement 2 is incorrect. Aurora Borealis occurs in the Northern Hemisphere and Aurora Australis in the Southern Hemisphere. They are caused when charged particles from the solar wind interact with gases in the Earth's upper atmosphere along magnetic field lines. The auroral emissions occur mainly in the thermosphere, not the mesosphere.

23. (b)

Bora is a cold, dry and often strong downslope wind that blows from the mountainous areas toward the Adriatic Coast, particularly along the eastern Adriatic region. Therefore, A-4 is correct.

Santa Ana is a hot, dry and strong wind that occurs in Southern California. It generally develops when high pressure over the interior Great Basin drives air toward the lower-pressure coastal region. Therefore, B-2 is correct.

Föhn is a warm and dry downslope wind associated with the Alps. As air descends on the leeward side of the mountains, it becomes warmer and drier. Therefore, C-1 is correct.

Pampero is a cold, dry wind that affects the Pampas region of Argentina and Uruguay, usually associated with the passage of a cold front. Therefore, D-3 is correct.

24. (d)

Assertion (A) is correct. Coral bleaching occurs when corals are exposed to environmental stress, especially prolonged or unusually high sea-surface temperatures. Thermal stress disrupts the relationship between corals and their symbiotic algae called zooxanthellae, which provide much of the coral's energy and colour. When the algae are expelled, the coral tissue becomes pale or white, producing coral bleaching.

Reason (R) is correct. The Great Barrier Reef is situated off the northeastern coast of Australia, mainly along the coast of Queensland. It extends roughly from 10°S to 24°S latitude and is the world's largest coral reef system.

However, the geographical location of the Great Barrier Reef has no direct explanatory relationship with the process of coral bleaching described in the Assertion. The Reason merely provides the location and latitudinal extent of a major coral reef system. Therefore, both A and R are true, but R is not the correct explanation of A.

25. (b)

Xenon is the least abundant among the four gases listed. It is a noble gas and occurs in the atmosphere at only about 0.087 ppm. Its extremely low concentration places it first when the gases are arranged according to their atmospheric abundance.

Hydrogen is present in the atmosphere in a very small proportion, about 0.55 ppm. Although hydrogen is the most abundant element in the universe, its concentration in Earth's atmosphere is very low because molecular hydrogen is extremely light and can escape from the upper atmosphere. Therefore, it comes after xenon in the given list.

Krypton is another noble gas and occurs at about 1.1 ppm in the atmosphere. Its abundance is greater than that of hydrogen but much lower than that of helium. Hence, krypton occupies the third position in the ascending order.

Helium occurs at about 5.2 ppm in Earth's atmosphere, making it the most abundant of the four gases given in the question. Like hydrogen, helium is very light, but as a noble gas it is chemically inert. Its atmospheric concentration is still much higher than that of xenon, hydrogen and krypton.

26. (c)

Statement 1 is correct. Water vapour is concentrated mainly in the lower atmosphere, particularly the troposphere. Its amount generally decreases with increasing altitude because most water vapour originates from evaporation from oceans, lakes, rivers and moist land surfaces. As moist air rises, it cools and water vapour condenses, so the atmosphere becomes progressively drier with height.

Statement 2 is correct. Water vapour plays an important role in atmospheric stability and instability. When moist air rises and water vapour condenses, latent heat is released. This reduces the rate at which the rising air parcel cools compared with dry air. Consequently, moist air can continue rising more readily, favouring convection and atmospheric instability. The presence and distribution of water vapour therefore influence cloud formation, rainfall and vertical air movement.

27. (b)

Rudraprayag is located at the confluence of the Alaknanda and Mandakini rivers. The Mandakini originates from the Chorabari Glacier near Kedarnath and joins the Alaknanda at Rudraprayag.

Devprayag is the confluence of the Alaknanda and Bhagirathi rivers. After their confluence at Devprayag, the combined river is known as the Ganga. Thus, Devprayag is traditionally regarded as the point where the Ganga begins.

Karnaprayag is situated at the confluence of the Alaknanda and Pindar rivers. The Pindar originates from the Pindari Glacier in the Kumaon Himalaya and joins the Alaknanda at Karnaprayag.

Vishnuprayag is the confluence of the Alaknanda and Dhauliganga rivers. It is located in Chamoli district of Uttarakhand and is the first of the five Panch Prayag when travelling downstream along the Alaknanda.



28. (b)

Florida Current is a warm current of the North Atlantic Ocean. It flows northward through the Florida Straits between Florida and Cuba and forms part of the current system that develops into the Gulf Stream.

Agulhas Current is a warm current of the Indian Ocean. It flows southward along the southeastern coast of Africa and is therefore not a North Atlantic current.

Canary Current is a cold current of the North Atlantic Ocean. It flows southward along the northwestern coast of Africa and is associated with the eastern boundary of the North Atlantic circulation.

Antilles Current is a warm current of the North Atlantic Ocean. It flows westward along the northern side of the Greater Antilles and contributes to the warm-water circulation entering the Caribbean region.

29. (b)

Hiroshima is located on Honshu, Japan's largest island. Nagasaki is located on Kyushu, not Hokkaido, making Pair 2 incorrect. Sapporo is located on Hokkaido, while Nagoya is located on Honshu. Thus, Pairs 1, 3 and 4 are correctly matched.



30. (a)

Kazakhstan has Astana as its capital, Kyrgyzstan has Bishkek, Turkmenistan has Ashgabat, Tajikistan has Dushanbe, and Uzbekistan has Tashkent.



31. (a)

Statement 1 is correct: The BBNJ Agreement is an **implementing agreement under UNCLOS**. It is the third such agreement, after the 1994 Agreement on Part XI (deep seabed) and the 1995 UN Fish Stocks Agreement.

Statement 2 is correct: The text was adopted on **19 June 2023** and opened for signature on 20 September 2023. It needed **60 ratifications**; that threshold was crossed in September 2025, and the Agreement **entered into force on 17 January 2026**.

Statement 3 is not correct: The treaty applies to **areas beyond national jurisdiction**, that is, the **high seas** (the water column beyond the 200 nautical mile EEZ) and **"the Area"** (the international seabed). Resources inside an EEZ remain under the sovereign rights of the coastal State.

The BBNJ Agreement rests on four pillars: (i) **marine genetic resources**, including digital sequence information, with fair benefit-sharing; (ii) **area-based management tools** such as high-seas **marine protected areas**; (iii) **environmental impact assessments**; and (iv) **capacity building and transfer of marine technology**. Areas beyond national jurisdiction make up nearly **two-thirds of the ocean**.. Seabed mining in the area continues to be regulated by the **International Seabed Authority (Kingston, Jamaica)**.

Hence option (a) is correct.

32. (b)

Pair 1 is correctly matched: Blue carbon is the carbon captured and stored by **coastal and marine ecosystems**, chiefly mangroves, seagrass meadows and tidal salt marshes. These ecosystems bury carbon in waterlogged sediments where it can remain for centuries.

Pair 2 is correctly matched: Teal carbon is the carbon held in the vegetation, soils and organic matter of **inland freshwater wetlands** such as marshes, floodplains and peatlands. Such wetlands hold a share of global soil carbon far larger than the land area they cover.

Pair 3 is NOT correctly matched: Brown carbon is a class of **light-absorbing organic aerosols**, released mainly by **biomass burning** (crop residue, firewood, forest fires). It is an air pollutant that absorbs sunlight and warms the atmosphere; it has nothing to do with permafrost.

Green carbon is carbon stored in terrestrial forests, grasslands and soils. **Black carbon** is soot from the incomplete combustion of fossil fuels and biomass; it is a **short-lived climate pollutant** and speeds up the melting of Himalayan glaciers when deposited on snow. Black and brown carbon are aerosols that warm the climate, whereas blue, teal and green carbon are stores (sinks) of carbon.

Hence two pairs are correctly matched, and option (b) is correct.

33. (c)

Statement 1 is correct: The base condition is that the maximum temperature reaches at least **40°C in the plains** and at least **30°C in hilly regions**.

Statement 2 is correct: For **coastal stations**, a heat wave may be described when the departure is **4.5°C or more**, provided the **actual maximum is 37°C or more**.

Statement 3 is not correct: A departure of **4.5°C to 6.4°C** defines an ordinary **heat wave**. A **severe heat wave** requires a departure of **more than 6.4°C**. On the actual-temperature basis, a maximum of **45°C or more** is a heat wave and **47°C or more** is a severe heat wave.

The criteria must be met at **at least two stations in a meteorological sub-division for at least two consecutive days**, and the heat wave is declared on the second day. IMD also issues **warm night** alerts based on minimum temperatures. **Ahmedabad** prepared the first **Heat Action Plan** in South Asia (2013), a model later adopted by many Indian cities. A **wet-bulb temperature of about 35°C** is widely cited as the theoretical upper limit of human survival under prolonged exposure, because sweat can no longer cool the body.

Hence option (c) is correct.

34. (b)

Both A and R are true, but R is not the correct explanation of A.

A is true: The **Environmental Kuznets Curve (EKC)** suggests that in the early stages of growth, pollution and resource depletion increase; beyond a certain income level, rising demand for a clean environment, better technology and stronger regulation cause degradation to decline. The relationship is therefore an **inverted U**.

R is true: In 1955 **Simon Kuznets** argued that **income inequality** first widens and then narrows as an economy develops. The EKC borrows his name only because its shape is similar. Kuznets' work was about **inequality, not pollution**, so R explains the name of the curve, not the environmental relationship stated in A.

The EKC was popularised in the early 1990s by **Grossman and Krueger** and by the World Bank's World Development Report 1992. The pattern holds reasonably well for **local pollutants such as sulphur dioxide**,

but not for **carbon dioxide**, which has kept rising with income in most countries. Critics add that rich countries may simply shift polluting industries abroad, the so-called **pollution haven hypothesis**.

Hence option (b) is correct.

35. (d)

Option (d) is correct: Earth Overshoot Day is computed by the **Global Footprint Network**, an international research organisation co-founded by **Mathis Wackernagel**. It compares humanity's **Ecological Footprint** (demand for food, timber, fibre, land for infrastructure and absorption of carbon emissions) with the planet's **biocapacity**.

In **2025 it fell on 24 July**. By the Network's estimate, humanity is currently using nature about **1.8 times faster** than ecosystems can regenerate, which is the same as living off roughly 1.8 Earths. The later the date falls in the year, the smaller the overshoot.

Why the other options are wrong: WWF, UNEP and IUCN publish other well-known assessments but do not calculate this date.

Also remember: The **Ecological Footprint** concept was developed in the 1990s by **Mathis Wackernagel and William Rees**. The **Living Planet Report**, which tracks wildlife population trends through the Living Planet Index, is published by **WWF with the Zoological Society of London**. The **IUCN** publishes the Red List of Threatened Species, and **UNEP** publishes the Emissions Gap Report and the Global Environment Outlook.

Hence option (d) is correct.

36. (a)

Statement 1 is correct: Keibul Lamjao (about 40 sq km, Bishnupur district) lies on the south-eastern part of **Loktak Lake** and is described as the **only floating national park in the world**. It floats on **phumdis**, thick mats of vegetation, soil and organic matter that rise and sink with the water level. It was declared a national park in 1977.

Statement 2 is not correct: The **Sangai** (Rucervus eldii eldii), the "dancing deer", is a subspecies of **Eld's deer (brow-antlered deer)**, not of the swamp deer. The **swamp deer or barasingha** (Rucervus duvaucelii) is a different species, and it is the **State animal of Uttar Pradesh**.

The Sangai is the **State animal of Manipur**, and the State's annual Sangai Festival is named after it. Its numbers had fallen to just 14 in 1975 before recovering to a few hundred. The main threat is the **Ithai Barrage** of the Loktak hydroelectric project, which keeps water levels high and thins the phumdis. **Loktak** is the largest freshwater lake in North-East India, a Ramsar site since 1990, and has been on the **Montreux Record since 1993**.

Hence option (a) is correct.

37. (b)

Statement 1 is correct: The **Montreux Record**, maintained as part of the Ramsar List, flags Ramsar sites whose ecological character has been, is being, or is likely to be **adversely changed by human interference**. It was set up by a recommendation of the Ramsar Conference of the Parties held at **Montreux, Switzerland, in 1990**. A site is placed on it with the agreement of the country concerned, and it can receive technical help through Ramsar Advisory Missions.

Statement 2 is not correct: Chilika was added in 1993 but was **removed in 2002** after a new lagoon mouth was opened and its salinity and fisheries recovered. It is a widely cited example of successful wetland restoration.

Statement 3 is correct: Keoladeo National Park was listed in **1990**, mainly because of shortage of water inflow and the spread of invasive grasses. It remains on the Record, along with **Loktak Lake** (listed 1993). These are the only two Indian sites currently on it.

The **Ramsar Convention** was signed in 1971 at Ramsar, Iran, and **World Wetlands Day** is observed on **2 February**, the date of its signing. **Chilika and Keoladeo** were India's first Ramsar sites (1981). Chilika is Asia's largest brackish-water lagoon and a major wintering ground for migratory birds.

Hence option (b) is correct.

38. (c)

A-3: Silent Spring (1962) by the American marine biologist **Rachel Carson** exposed the damage caused by pesticides such as **DDT** to birds and ecosystems. It is often credited with launching the modern environmental movement and contributed to the US ban on DDT (1972).

B-4: "The Tragedy of the Commons" (1968), an essay in the journal Science by **Garrett Hardin**, argued that individuals acting in self-interest will over-use a shared, open-access resource until it is destroyed.

C-2: The Gaia hypothesis, proposed by **James Lovelock** in the 1970s and developed with Lynn Margulis, views the Earth as a **self-regulating system** in which living organisms interact with the atmosphere, oceans and rocks to maintain conditions suitable for life.

D-1: Deep ecology, a term coined in 1973 by the Norwegian philosopher **Arne Naess**, holds that nature has **intrinsic value** independent of its usefulness to humans, in contrast to "shallow", human-centred environmentalism.

Small is Beautiful (1973) was written by **E.F. Schumacher**; The Limits to Growth (1972) was a report to the **Club of Rome**; Our Common Future (1987), the **Brundtland Commission** report, gave the standard definition of sustainable development. **Elinor Ostrom** won the 2009 Economics Nobel for showing that communities can manage commons successfully, challenging Hardin's conclusion.

Hence the correct combination is A-3, B-4, C-2, D-1, and option (c) is correct.

39. (d)

From the surface downward the pelagic zones are: **Epipelagic** (0 to about 200 m) → **Mesopelagic** (about 200 to 1,000 m) → **Bathypelagic** (about 1,000 to 4,000 m) → **Abyssopelagic** (about 4,000 to 6,000 m), followed by the **Hadal zone** of the deep trenches.

The **epipelagic (sunlight) zone** receives enough light for **photosynthesis** and holds most of the ocean's phytoplankton. In the **mesopelagic (twilight) zone** light fades and photosynthesis is not possible; its animals make the largest daily migration on Earth, rising to feed at night. Below about 1,000 m, the **bathypelagic (midnight) zone** is permanently dark, and the only light comes from **bioluminescent** organisms.

Hence the correct order is 2, 4, 1, 3, and option (d) is correct.

40. (c)

Statement 1 is not correct: Minamata disease, identified in 1956 at Minamata Bay in Kumamoto Prefecture, Japan, was caused by **methylmercury** in the wastewater of the **Chisso Corporation's** chemical factory. The mercury built up in fish and shellfish and severely damaged the nervous systems of people who ate them. The disease caused by **cadmium** from mining waste in the Jinzu River basin is **Itai-itai disease**.

Statement 2 is correct: The **Minamata Convention on Mercury**, a global treaty to protect human health and the environment from mercury, was adopted and opened for signature at **Kumamoto, Japan, in October 2013** and **entered into force on 16 August 2017**. **India ratified it on 18 June 2018.**

Also remember: The Convention banned the manufacture, import and export of many **mercury-added products** (certain batteries, thermometers, fluorescent lamps and cosmetics) from **2020**, calls for the **phase-down of dental amalgam**, and requires action on mercury use in **artisanal and small-scale gold mining**, the largest source of mercury emissions. The chemicals and waste treaties form a family: **Basel** (hazardous waste movement), **Rotterdam** (prior informed consent), **Stockholm** (persistent organic pollutants) and **Minamata** (mercury).

Hence option (c) is correct.

41. (b)

Statement 1 is correct. The Sustainable Development Report 2026 was released on 28 June 2026 at the Hamburg Sustainability Conference. India was ranked **94th out of 167 countries** with a score of **68.3/100**, up from 99th in 2025 and 112th in 2015, making 2026 India's best-ever position since the SDGs were adopted in 2015. Even so, India still ranks below four South Asian neighbours: Bhutan, Maldives, Nepal and Sri Lanka.

Statement 2 is correct. The Nordic countries again led the index: **Finland (1st), Sweden (2nd) and Denmark (3rd)**. The report also contains an "Index of Support to UN-based Multilateralism", in which **Barbados ranked first and the United States ranked last**.

Statement 3 is incorrect. The SDR is published by the **UN Sustainable Development Solutions Network (SDSN)**, a global initiative launched in 2012 under the auspices of the UN Secretary-General, not by the UNDP. The UNDP publishes the **Human Development Report/HDI**, in which India was ranked 130th out of 193 countries in HDR 2025.

According to the 2026 report, only **33.3% of India's SDG targets** are on track for 2030. SDG 2 (Zero Hunger) remains India's weakest area, with child wasting at about 19% and stunting at about 29.3%. Don't confuse the SDSN's global index with **NITI Aayog's SDG India Index**, which ranks Indian states and UTs. There are 17 SDGs and 169 targets, adopted by the UN General Assembly in September 2015 as part of Agenda 2030. Hence option (b).

42. (c)

A-3: The Energy Transition Index (ETI) 2026 was released by the **World Economic Forum** on 18 June 2026 and tracks **120 countries**. **Sweden, Finland and Denmark** took the top three places. **India was ranked 70th** and was among the notable gainers. Globally, energy-transition readiness declined for the first time in more than a decade.

B-1: The Global Terrorism Index (GTI) 2026 (13th edition) is published by the **Institute for Economics & Peace (IEP), Sydney**, which also publishes the Global Peace Index. **Pakistan** was the most terrorism-affected country, followed by Burkina Faso, Nigeria, Niger and the DR Congo. **India was ranked 13th**. Terrorism deaths fell by about 28% in 2025, and the Sahel accounted for more than half of global terrorism deaths.

C-4: The Climate Change Performance Index (CCPI) 2026 is published by **Germanwatch, the NewClimate Institute and Climate Action Network (CAN) International**. It was released at **COP30 in Belém, Brazil**. As usual, the **top three ranks were left vacant** because no country performed "very high"; Denmark was 4th, the UK 5th and Morocco 6th. **India slipped from 10th to 23rd**, mainly because of rising emissions and the lack of a coal phase-out plan.

D-2: The World Competitiveness Ranking 2026 is produced by the **IMD World Competitiveness Center (Lausanne, Switzerland)** and covers **70 economies**. **Singapore, Hong Kong and Switzerland** took the top three places.

Hence option (c).

Other important publishers to remember are Global Hunger Index (Concern Worldwide and Welthungerhilfe), World Press Freedom Index (Reporters Without Borders), Global Gender Gap Index (WEF), Corruption Perceptions Index (Transparency International) and Global Innovation Index (WIPO).

43. (b)

Statement 1 is correct. In the QS World University Rankings 2027, announced on 18 June 2026, **IIT Delhi remained India's top-ranked institution**, rising from 123rd (QS 2026) to **118th**. IIT Bombay, IIT Madras and IISc Bengaluru were among the other top Indian institutions.

Statement 2 is correct. 52 Indian institutions, including **13 IITs**, featured in the 2027 edition, which ranked about **1,504 institutions** worldwide (with 98 new entrants). Globally, **MIT kept the top spot for another year**, with Imperial College London and Stanford University tied at 2nd.

Statement 3 is incorrect. The QS rankings are published by **Quacquarelli Symonds (QS), a London-based higher-education analytics firm**. The **Times Higher Education (THE) World University Rankings** are a separate ranking. Examiners often swap these two publishers.

Hence option (b).

44. (a)

The **Uttar Pradesh Defence Industrial Corridor (UPDIC)** was announced by the Prime Minister at the **UP Investors Summit, Lucknow, in February 2018**. It has **six nodes: Agra, Aligarh, Chitrakoot, Jhansi,**

Kanpur and Lucknow. The nodal agency is the **Uttar Pradesh Expressways Industrial Development Authority (UPEIDA)**. **Meerut and Gorakhpur are not nodes.**

Status in 2026: The corridor has moved from planning to production. Projects worth about **₹13,500 crore** are being implemented, and investment proposals total about ₹40,000 crore. **Kanpur** has become the main hub for **ammunition, small arms, defence textiles and protective gear**; for example, Adani Defence & Aerospace has invested about ₹4,000 crore in an ammunition complex there. **Lucknow** hosts the **BrahMos Aerospace integration and testing facility**, inaugurated in **May 2025**.

Hence option (a).

45. (d)

BAHS 2025 was released by the Department of Animal Husbandry & Dairying on **26 November 2025 (National Milk Day)**. It covers the survey period from March 2024 to February 2025, i.e., production for **2024-25**.

A-3 (Milk – Uttar Pradesh): India produced **247.87 million tonnes** of milk (+3.58%) and is the **world's largest milk producer**. UP leads with **15.66%**, followed by Rajasthan (14.82%), Madhya Pradesh (9.12%), Gujarat (7.78%) and Maharashtra (6.71%); these five states together account for about 54% of national output. Per-capita milk availability rose from 319 g/day (2014-15) to **485 g/day**.

B-4 (Eggs – Andhra Pradesh): Egg production was **149.11 billion**, and India is the **2nd largest egg producer** in the world. Andhra Pradesh leads with 18.37%, followed by Tamil Nadu (15.63%) and Telangana (12.98%). Per-capita availability is about 106 eggs a year.

C-2 (Meat – West Bengal): Meat production was **10.50 MT** (India ranks 4th in the world). West Bengal leads with 12.46%, with **Uttar Pradesh a close second (12.20%)**, followed by Maharashtra (11.57%). Poultry contributes roughly half of total meat output.

D-1 (Wool – Rajasthan): Wool production was **34.57 million kg**. Rajasthan alone contributes about **47.85%**, followed by Jammu & Kashmir (22.88%) and Gujarat (6.22%).

Hence option (d).

46. (b)

Statement 1 is correct. In FRA 2025, released by the FAO in **October 2025 (at Bali, Indonesia)**, India rose to **9th place globally in total forest area** (about 72.7 million hectares), up from 10th in the previous assessment.

Statement 2 is incorrect. India **kept its 3rd position** (not 2nd) in **annual net gain in forest area**, behind **China (1st) and Russia (2nd)**.

Statement 3 is correct. The top countries by forest area are **Russia (about 832.6 million ha), Brazil (about 486 million ha), Canada, the USA and China**. Together these five hold more than half of the world's forests. The world has about **4.14 billion hectares** of forest (about 32% of land), and tropical forests make up about 45% of the total.

Hence option (b).

The FRA is published by the **FAO every five years**, based on official national data from 236 countries and territories. Global deforestation averaged about **10.9 million ha per year (2015–2025)**, slower than in earlier decades. Don't confuse the FRA with India's own **India State of Forest Report (ISFR)**, published every two years by the **Forest Survey of India, Dehradun**. According to ISFR 2023 (released in December 2024), India's forest and tree cover is about **25.17% of its geographical area**, against the National Forest Policy (1988) goal of 33%. Related schemes: Green India Mission, CAMPA and the "Ek Ped Maa Ke Naam" campaign.

47. (c)

Statement 1 is correct. According to the **World Steel Association (worldsteel)**, global crude steel output in 2025 was **1,849.4 million tonnes (Mt)**, 2.0% lower than 2024. **China (960.8 Mt)** remained first. **India (164.9 Mt, +10.4%)** was second and had the fastest growth among major producers.

Statement 2 is incorrect. In 2025 the **United States (82.0 Mt)** was 3rd, just ahead of **Japan (80.7 Mt)**, which slipped to 4th; Russia (67.8 Mt) was 5th. Questions based on such ranking changes are popular with examiners.

Statement 3 is correct. According to the Ministry of Coal, India's coal production in **2024-25 was 1,047.52 million tonnes (+4.98%)**, the first time output crossed one billion tonnes. Coal India Limited produced about 781 MT and SCCL about 69 MT. In 2025-26, **captive and commercial mines alone produced a record 210.46 MT**, crossing 200 MT for the first time.

Hence option (c).

48. (d)

Statement 1 is correct. According to SRS 2024, **India's IMR fell to 24** per 1,000 live births, down from 25 in 2023 and 30 in 2019. The rural IMR is 27. The **Under-5 Mortality Rate is 28**.

Statement 2 is correct. Bihar has the highest TFR (2.9) and **Delhi the lowest (1.2)**, with Kerala close behind (1.3). India's national TFR is **1.9**, below the replacement level of 2.1, the same as in SRS 2023.

Statement 3 is correct. Kerala has the lowest IMR (8), while **Chhattisgarh has the highest (36)**. Other national figures: Crude Birth Rate 18.3 (rural 20.2, urban 14.7), Crude Death Rate 6.4, **Sex Ratio at Birth 918** girls per 1,000 boys, and **95.4%** institutional deliveries.

Hence option (d).

49. (c)

2 → 1 April 2026: The **Houselisting and Housing Census (HLO)** phase began on 1 April 2026 and runs until **30 September 2026**. Each State/UT has a 30-day window in this period, and **online self-enumeration** is available for about 15 days before door-to-door listing, for the first time in an Indian census.

3 → 22 May 2026: In **Uttar Pradesh**, houselisting ran from **22 May to 20 June 2026**, with self-enumeration registration opening on 7 May. The state was divided into about **3.9 lakh enumeration blocks**. After self-enumeration, households get a unique code to share with the enumerator.

1 → 1 October 2026: This is the reference date for **snow-bound areas** (Ladakh, J&K, Himachal Pradesh, Uttarakhand), where population enumeration is done in September 2026.

4 → 1 March 2027 (00:00 hours): This is the reference date for the rest of the country, with population enumeration planned for **9–28 February 2027**. The correct sequence is therefore **2, 3, 1, 4**.

Hence option (c).

50. (a)

Statement 1 is correct. The **26th meeting of the SCO Council of Heads of State** was held on **31 August – 1 September 2026 at Bishkek, Kyrgyzstan**, with the Kyrgyz chairmanship theme "25 Years of the SCO: Together for Sustainable Peace, Development and Prosperity". The **Bishkek Declaration** was adopted along with 27 other documents, including a Protocol amending the SCO Charter. An "SCO Plus" meeting was also held. **Prime Minister Narendra Modi attended.**

Statement 2 is incorrect. Pakistan (not Kazakhstan) took over the chairmanship for **2026-27**, with the theme "Turning Vision into Action: Connectivity, Innovation and Shared Prosperity". The next summit is to be held in Islamabad.

Statement 3 is correct. Lahore was designated the **SCO Tourism and Cultural Capital for 2026-27**. The summit also approved an MoU between the SCO Secretariat and the African Union Commission.

Hence option (a).

51. (c)

Statement 1 is incorrect. Balaji Bajirao, popularly known as Nanasaheb, succeeded Bajirao I, not Balaji Vishwanath, as Peshwa in 1740. Balaji Vishwanath was his grandfather and the first Peshwa of the Bhat family. Balaji Bajirao remained Peshwa until 1761.

Statement 2 is incorrect. The Battle of Udgir (1760) was fought between the Marathas under Sadashivrao Bhau and the Nizam of Hyderabad, Nizam Ali Khan, not Ahmad Shah Abdali. It took place during Balaji

Bajirao's tenure, shortly before the Third Battle of Panipat, but the opponent stated in the statement is incorrect.

Statement 3 is correct. During Balaji Bajirao's tenure, Poona (Pune) emerged as the principal political centre and headquarters of the Maratha government. The Peshwa's administration and political influence became increasingly centred there.

Statement 4 is correct. During Balaji Bajirao's tenure, the Nawab of Bengal, Alivardi Khan, agreed to the Maratha demand concerning Orissa (Odisha). Under the Treaty of 1751, Orissa was ceded to the Marathas and the Nawab agreed to pay an annual chauth of ₹12 lakh to them.

52. (d)

Dravya Sangraha — Nemichandra:

Dravya Sangraha is an important Jain philosophical work attributed to Nemichandra Siddhanta Chakravartin. It explains fundamental Jain concepts, particularly the nature and classification of dravya (substance) and the six substances recognised in Jain philosophy.

Tattvartha Sutra — Umaswami:

The Tattvartha Sutra, also known as Tattvarthadhigama Sutra, is attributed to Umaswami (Umasvati). It is a systematic Sanskrit exposition of fundamental Jain doctrines and is notable for its acceptance in both the major Jain traditions.

Nyayavatara — Siddhasena Divakara:

Nyayavatara is attributed to Siddhasena Divakara. It is an important early Jain treatise dealing with logic, valid knowledge and methods of reasoning.

Nyaya Dipika — Dharmabhusana:

Nyaya Dipika is associated with Dharmabhusana, a Jain scholar of logic and epistemology. The work belongs to the Jain tradition of systematic treatment of Nyaya and pramana.

53. (c)

The First Anglo-Afghan War took place from 1839 to 1842. It was fought between the British East India Company and the Emirate of Afghanistan. The British intervened in Afghan affairs with the objective of placing Shah Shuja on the Afghan throne, partly in the context of the geopolitical rivalry known as the Great Game. The British occupation ultimately failed, and the retreat from Kabul in 1842 became one of the major military disasters of British India.

The Second Anglo-Sikh War occurred during 1848–1849. It began with the revolt at Multan led by Diwan Mulraj, which developed into a wider conflict between the Sikh forces and the British. The British victory at the Battle of Gujrat in 1849 brought the war to an end and was followed by the annexation of Punjab.

The annexation of Jhansi took place in 1854 under the Doctrine of Lapse implemented during Lord Dalhousie's tenure as Governor-General. After the death of Raja Gangadhar Rao without a biological male heir, the British refused to recognise the adopted son Damodar Rao as the successor for purposes of sovereignty and annexed Jhansi. The annexation later became an important background to Rani Lakshmibai's role in the Revolt of 1857.

The Santhal Rebellion, also known as the Santhal Hul, began in 1855 in the Rajmahal Hills region. It was led principally by Sidhu and Kanhu Murmu, along with their brothers Chand and Bhairav. The Santhals rose against exploitation by moneylenders, zamindars and other intermediaries, as well as the oppressive functioning of colonial revenue and administrative arrangements. The rebellion was eventually suppressed by the British.

54. (d)

The Assertion is incorrect because Gandhi did not argue that English education completely prevented Indians from acquiring knowledge. His criticism was directed against the dominance and character of colonial education rather than against the acquisition of knowledge through English itself.

The Reason is correct. Gandhi criticised the colonial education system because, in his view, it alienated Indians from their own cultural roots, languages and social environment. He believed that excessive

emphasis on English and Western education encouraged educated Indians to admire Western civilisation while becoming distanced from Indian traditions and the needs of ordinary people.

55. (a)

A. Arz-i-Mumalik → 4. Head of the military department

The Ariz-i-Mumalik was the head of the military department of the Delhi Sultanate. He was responsible for military administration, including the organisation and maintenance of the army, recruitment, inspection of troops and related matters.

B. Amir-i-Akhur → 3. Head of stables

The Amir-i-Akhur was the officer in charge of the royal stables. He supervised the Sultan's horses and the administration of the stables, which were particularly important for the cavalry-based military system.

C. Amir-i-Hajib → 2. Enforcement of court etiquette

The Amir-i-Hajib was associated with the royal court and its ceremonial arrangements. He supervised court etiquette and regulated access to the Sultan, ensuring proper observance of court protocol.

D. Wakil-i-Dar → 1. Management of the personal service of the Sultan and the royal household.

The Wakil-i-Dar was responsible for the Sultan's household and personal service, including the management of the royal palace and household establishments.

56. (b)

Statement 1 is incorrect because Rudrasena II was a Vakataka ruler, not the Western Kshatrapa ruler defeated by Chandragupta II. The Western Kshatrapa ruler associated with Chandragupta II's conquest is Rudrasimha III. Chandragupta II adopted the title Sakari after his victory over the Sakas.

Statement 2 is correct. The conquest of the Western Kshatrapa territories extended Gupta control into western India, including territories connected with important trade routes and the western coast.

Statement 3 is correct. After the conquest of the Western Kshatrapas, Chandragupta II issued silver coins modelled on the existing Western Kshatrapa coinage, reflecting Gupta control over the region.

Statement 4 is incorrect. Fa-Hien visited India during the reign of Chandragupta II, but there is no sound basis for stating that he visited Chandragupta II's court and stayed there for one year. His travel account is an important source for understanding India during the Gupta period.

57. (d)

Royal Titles Act, 1876: The Royal Titles Act was passed in 1876 during the tenure of Lord Northbrook's successor, Lord Lytton as Viceroy of India. The Act authorised Queen Victoria to assume the title of Empress of India. The measure was closely associated with the British government's effort to emphasise the imperial character of the British Crown's authority over India.

First Delhi Durbar, 1877: The First Delhi Durbar was held on 1 January 1877 during the viceroyalty of Lord Lytton. It was organised to formally celebrate and announce Queen Victoria's assumption of the title Empress of India. The event was a major imperial ceremony and was attended by Indian princes and other dignitaries.

Vernacular Press Act, 1878: The Vernacular Press Act was enacted in 1878 during the tenure of Lord Lytton. It imposed restrictions on the Indian-language press and empowered the colonial authorities to take action against publications considered critical of the government. The Act was strongly criticised for its discriminatory treatment of the vernacular press and was repealed in 1881 during the viceroyalty of Lord Ripon.

First Factory Act, 1881: The First Factory Act was passed in 1881 during the tenure of Lord Ripon. It was one of the earliest legislative measures dealing with factory labour conditions in British India. It introduced restrictions concerning the employment and working hours of children in certain factories and provided for some basic regulation of working conditions.

58. (b)

Statement 1 is incorrect. The British Indian Association was established in 1851, not 1875. It was formed primarily to represent the political interests and grievances of the landed and educated sections of Bengal. The objective stated in the question should therefore not be attributed to its formation in 1875.

Statement 2 is correct. The British Indian Association was established in 1851 through the merger of the Landholders' Society, founded in 1838, and the Bengal British India Society, founded in 1843. It became one of the important early political associations in British India.

Statement 3 is correct. In Bengali, the association was referred to as Bharatvarshiya Sabha. This Bengali designation is associated with the organisation in contemporary records.

Statement 4 is incorrect. Radhakanta Deb was not the first secretary of the British Indian Association. He was a prominent conservative leader and had earlier been associated with the Landholders' Society. The British Indian Association's first president was Radhakanta Deb, while Debendranath Tagore served as its first secretary.

59. (b)

Kashf-ul Mahjub is a celebrated Persian treatise on Sufism written by Ali ibn Usman al-Hujwiri, popularly known as Data Ganj Baksh. It is one of the earliest comprehensive works explaining Sufi doctrines, practices, terminology and different Sufi traditions. Therefore, A matches with 2, manuals dealing with Sufi thought.

Fawa'id-al Fu'ad is a collection of the discourses and conversations of Shaikh Nizamuddin Auliya, compiled by Amir Hasan Sijzi Dehlavi. It provides valuable information about the teachings, spiritual ideas and social outlook of the Chishti saint. Therefore, B matches with 4, conversations of Shaikh Nizamuddin Auliya.

Siyar-ul Auliya was written by Mir Khurd Kirmani. It contains accounts of Sufi saints and their lives, particularly important Chishti figures. It is an important source for the history of Sufism in medieval India. Therefore, C matches with 1, biographical accounts of saints.

Maktubat-i Imam Rabbani is a collection of letters written by Shaikh Ahmad Sirhindi, also known as Imam Rabbani. These letters discuss religious, spiritual and social issues and provide important insights into Sirhindi's ideas. Therefore, D matches with 3, letters of Shaikh Ahmad Sirhindi.

60. (d)

The Junagadh inscription of Rudradaman I is an important source for the history of the Western Kshatrapas. It was issued by Rudradaman I, a prominent Western Kshatrapa ruler, and is generally dated to 150 CE. The inscription is especially significant for the history of Sanskrit epigraphy because it is one of the earliest long inscriptions composed in Sanskrit.

Statement 1 is incorrect. The inscription is written in the Brahmi script, not Kharosthi. Its language is Sanskrit. Therefore, although the language mentioned in the statement is correct, the script is incorrect, making the entire statement incorrect.

Statement 2 is incorrect. The Sudarshana Lake was not constructed by Rudradaman. It had been originally constructed during the Mauryan period, under the supervision of Pushyagupta, a provincial governor of Chandragupta Maurya. During the reign of Ashoka, Tushaspha, associated with the Yavana administration, is credited with further work on the reservoir and its irrigation system. Thus, attributing its original construction to Rudradaman is incorrect.

Statement 3 is correct. The inscription is dated to 150 CE, during the reign of Rudradaman I. It records the extensive repair and restoration of Sudarshana Lake after the reservoir and its embankments were damaged by a violent storm and heavy rainfall. The inscription also highlights that the restoration was undertaken without imposing additional taxes or forced labour on the population.

61. (d)

Statement 1 is incorrect. Article 20 is available to all persons, not only citizens. Its language uses "no person", and therefore foreigners are also entitled to its protection.

Statement 2 is incorrect. Article 20(1) prohibits the retrospective operation of criminal laws where a person is made liable for an act that was not an offence when committed or is given a greater penalty

than the one applicable at that time. It does not generally prohibit retrospective civil legislation. Rao Shiv Bahadur Singh v. State of Vindhya Pradesh (1953) recognised this protection.

Statement 3 is incorrect. Article 20(3) provides that no person accused of an offence shall be compelled to be a witness against himself. The protection is against testimonial compulsion in the context of criminal accusation, not a general protection covering civil proceedings. In Nandini Satpathy v. P.L. Dani (1978), the Supreme Court gave broad protection against compelled answers that could expose a person to criminal prosecution.

Statement 4 is incorrect. Article 20(3) protects against testimonial compulsion, not every form of physical evidence. In State of Bombay v. Kathi Kalu Oghad (1961), the Supreme Court held that obtaining physical evidence such as fingerprints and blood samples does not by itself amount to compelling an accused to be a witness against himself.

62. (a)

Part XV of the Constitution deals with Elections. It covers Articles 324 to 329 and includes provisions relating to the Election Commission and the electoral process.

Part XVI deals with Special Provisions Relating to Certain Classes. It contains provisions concerning the representation and safeguards of Scheduled Castes, Scheduled Tribes and certain other classes.

Part XVII deals with the Official Language. It contains provisions relating to the official language of the Union, regional languages and related linguistic matters.

Part XVIII deals with Emergency Provisions. It covers National Emergency, President's Rule and Financial Emergency.

63. (b)

Statement 1 is incorrect. High Courts are dealt with under Part VI, Chapter V (Articles 214–231) of the Constitution, not Part VII.

Statement 2 is incorrect. Article 216 states that every High Court shall consist of a Chief Justice and such other judges as the President may from time to time deem necessary to appoint. Therefore, the strength is not left to the discretion of the State Legislature.

Statement 3 is incorrect. For appointment of a High Court judge, the Supreme Court Collegium consists of the Chief Justice of India and the two senior-most judges of the Supreme Court, not four.

Statement 4 is correct. For transfer of a High Court judge under Article 222, the CJI consults the four senior-most judges of the Supreme Court, along with the Chief Justices of the two High Courts concerned.

64. (a)

Article 170 lays down the general rule that a State Legislative Assembly shall have not less than 60 and not more than 500 members.

The Constitution provides special arrangements for some smaller States. Goa and Mizoram have Legislative Assemblies of 40 members each, which is below the general minimum of 60. Sikkim has 32 elected members, also below 60, under its special constitutional arrangement.

Arunachal Pradesh is not an exception, because its Legislative Assembly has 60 members. Similarly, Meghalaya has 60 members. Therefore, neither Arunachal Pradesh nor Meghalaya should be included among States having fewer than 60 Assembly members.

65. (a)

The 94th Constitutional Amendment Act, 2006 amended Article 164 by removing the requirement of a Minister in charge of tribal welfare in Bihar, while retaining the provision for Jharkhand and Chhattisgarh.

The 95th Constitutional Amendment Act, 2009 amended Article 334 to extend the reservation of seats for Scheduled Castes and Scheduled Tribes in the Lok Sabha and State Legislative Assemblies for another ten years.

The 96th Constitutional Amendment Act, 2011 amended the Eighth Schedule by changing the name of the language from "Oriya" to "Odia."

The 97th Constitutional Amendment Act, 2011 introduced constitutional provisions relating to cooperative societies, including the insertion of Part IXB. The amendment also added the right to form cooperative societies under Article 19(1)(c) and inserted Article 43B in the Directive Principles.

66. (b)

Statement 1 is incorrect. A nominated member of a House is not completely exempt from disqualification on the ground of defection. Under the Tenth Schedule, a nominated member becomes liable for disqualification if he/she joins a political party after six months from the date of taking the seat. Therefore, the word "under all circumstances" makes the statement incorrect.

Statement 2 is correct. Under Paragraph 4 of the Tenth Schedule, when a political party merges with another political party, a member is protected from disqualification if he/she does not accept the merger and chooses to function as a separate group along with other members of the original political party. Thus, such a member is not disqualified merely for declining to join the merged party.

67. (c)

The Gauhati High Court presently has jurisdiction over four States of the North-Eastern region: Assam, Nagaland, Mizoram and Arunachal Pradesh. Therefore, Nagaland (1) and Mizoram (4) are correctly included.

Nagaland continues to fall under the jurisdiction of the Gauhati High Court, with a permanent bench at Kohima. Mizoram also falls under its jurisdiction, with a permanent bench at Aizawl.

Tripura and Meghalaya do not fall under the jurisdiction of the Gauhati High Court. Both have their own separate High Courts, established in 2013 along with the High Court of Manipur.

Thus, the correct answer is (a) 1 and 4 only.

Exam fact: The Gauhati High Court was originally the common High Court for the North-Eastern region, but after the establishment of separate High Courts for Meghalaya, Manipur and Tripura in 2013, its jurisdiction was reduced to Assam, Nagaland, Mizoram and Arunachal Pradesh.

68. (b)

Statement 1 is incorrect. The Estimates Committee consists of 30 members, but all 30 are elected from the Lok Sabha. The Rajya Sabha has no representation in this committee. Members are elected annually by the Lok Sabha through proportional representation by means of the single transferable vote. A minister cannot be elected to the committee.

Statement 2 is correct. The Public Accounts Committee consists of 22 members, of whom 15 are elected from the Lok Sabha and 7 from the Rajya Sabha. The committee examines the appropriation accounts and annual finance accounts of the Government of India and the reports of the Comptroller and Auditor-General relating to those accounts. Its composition therefore provides representation to both Houses.

Statement 3 is incorrect. The Committee on Public Undertakings also consists of 22 members, but it is not composed entirely of Lok Sabha members. It has 15 members from the Lok Sabha and 7 members from the Rajya Sabha. Thus, like the Public Accounts Committee, it is a bicameral financial committee.

Statement 4 is incorrect. Ministers cannot be members of the financial committees. The purpose of these committees is parliamentary scrutiny of government expenditure, accounts and public undertakings, and membership is therefore incompatible with holding ministerial office. If a member of one of these committees is appointed as a Minister, they cease to be a member of the committee.

69. (d)

The Thirteenth Constitutional Amendment Act, 1962 introduced Article 371A, granting special constitutional protection to Nagaland. The provision safeguards matters such as Naga religious and social practices, customary laws, administration of justice according to customary law, and ownership and transfer of land and its resources.

The Fifty-third Constitutional Amendment Act, 1986 inserted Article 371G for Mizoram. It provides constitutional protection to Mizo religious and social practices, customary laws, and matters relating to land and its resources.

The Fifty-fifth Constitutional Amendment Act, 1986 inserted Article 371H for Arunachal Pradesh. It gives the Governor special responsibility with respect to law and order in the State.

The Fifty-sixth Constitutional Amendment Act, 1987 facilitated the constitutional changes associated with Goa becoming a State, while Daman and Diu continued as a Union Territory.

70. (c)

Statement 1 is correct.

The Constitution (Fifty-eighth Amendment) Act, 1987 made provision for the publication of an authoritative Hindi text of the Constitution. It also amended the heading of Part XXII by adding the words "Authoritative Text in Hindi".

Statement 2 is correct.

The Fifty-eighth Amendment inserted Article 394A immediately after Article 394 in Part XXII. Article 394A specifically deals with the "Authoritative text in the Hindi language."

Statement 3 is incorrect.

Article 394A does not empower Parliament. It provides that the President shall cause to be published under his authority:

- First, the Hindi translation of the Constitution, incorporating all amendments made before its publication.
- Second, the Hindi translation of every constitutional amendment made in English.

Further, Article 394A(2) provides that the Hindi translation shall have the same meaning as the original, and if any difficulty arises in interpretation, the President shall cause the translation to be suitably revised. Under Article 394A(3), the published Hindi translation is deemed to be the authoritative text in Hindi for all purposes.

71. (a)

Statement 1 is correct. The Bay of Bengal generally experiences a higher frequency of tropical cyclones than the Arabian Sea. The Bay of Bengal is favourable for cyclone formation because of its warm sea-surface temperatures, high moisture availability and suitable atmospheric conditions. Cyclones forming over the Bay of Bengal frequently move towards the eastern coast of India, Bangladesh and Myanmar.

Statement 2 is correct. The eastern coast of India is more frequently affected by tropical cyclones than the western coast. The states of Odisha, Andhra Pradesh, Tamil Nadu and West Bengal are particularly exposed to cyclonic systems originating in the Bay of Bengal. The east coast's greater exposure is also related to the configuration of the Bay of Bengal and the typical tracks of cyclones.

Statement 3 is incorrect. Tropical cyclones affecting India are not most frequent during the southwest monsoon period from June to September. Cyclone activity over the North Indian Ocean is relatively suppressed during much of the southwest monsoon because of strong vertical wind shear and other unfavourable atmospheric conditions. The major cyclone seasons are the pre-monsoon period, particularly April-May, and the post-monsoon period, particularly October-November.

Statement 4 is correct. The post-monsoon season is an important period of tropical cyclone activity in the North Indian Ocean. October and November are particularly significant because the withdrawal of the southwest monsoon, warm ocean waters and favourable atmospheric conditions support cyclone formation. Many severe cyclones affecting India's eastern coast occur during this period.

72. (a)

Ledo Coalfield is located in Assam, particularly in the Tinsukia district around the Margherita area. It is an important coal-bearing region of northeastern India. Therefore, A–2 is correctly matched.

Chirimiri Coalfield is located in Chhattisgarh, in the northern part of the state, particularly in the Koriya region. It is one of the important coalfields associated with the coal resources of Chhattisgarh. Therefore, B–4 is correctly matched.

Tuli Coalfield is located in Nagaland and represents one of the coal-bearing areas of the state. The Tuli coal-bearing region is associated with Nagaland's relatively limited but geographically significant coal resources. Therefore, C–3 is correctly matched.

Kamptee Coalfield is located in Maharashtra, mainly in the Nagpur region and associated with the Wardha Valley coalfield system. Thus, D–1 is correctly matched.

73. (d)

Statement 1 is incorrect. The Siachen Glacier is located in the eastern Karakoram Range, not in the Ladakh Range. It lies in the high-altitude region of Ladakh and is part of the Karakoram mountain system. Karakoram contains several major glaciers, including Siachen, Baltoro and Biafo.

Statement 2 is correct. The Siachen Glacier lies to the west of Aksai Chin and north of the Nubra Valley. The Nubra Valley lies to the south of the Siachen Glacier and forms an important geographical approach towards the glacier. The glacier is situated in the broader Nubra–Shyok region of northern Ladakh.

The Siachen Glacier is strategically important because it lies in the eastern Karakoram near the Saltoro Range. The Saltoro Ridge forms a major geographical and strategic feature to the west of the glacier. Important passes in this region include Sia La, Bilafond La and Gyong La.

The glacier is fed by heavy snowfall at very high elevations and its meltwater contributes to the Nubra River, which subsequently joins the Shyok River. The Shyok is an important tributary of the Indus River.

74. (c)

Pair 1 is correctly matched. Cologne is situated on the Rhine River in Germany. The Rhine is one of the major rivers of western Europe and an important inland waterway.

Pair 2 is incorrectly matched. Lyon is located at the confluence of the Rhône and Saône rivers in France. It is not situated on the Rhine.

Pair 3 is correctly matched. Belgrade, the capital of Serbia, is situated at the confluence of the Danube and Sava rivers. The Danube is one of Europe's major international rivers.

Pair 4 is incorrectly matched. Berlin is situated on the Spree River, which is a tributary of the Havel. The Weser River is located in northwestern Germany and does not flow through Berlin.

75. (b)

Bhilai Steel Plant, Chhattisgarh: Bhilai Steel Plant was established with the technical and financial assistance of the former Soviet Union (USSR) under an agreement signed in 1955. It became one of India's earliest major integrated steel plants and an important symbol of Indo-Soviet industrial cooperation. Its principal iron ore source has been the Dalli-Rajhara mines of Chhattisgarh, with the Rowghat mines developed as an additional source. Coal has traditionally been obtained from the Jharia and Bokaro coalfields of Jharkhand, along with supplies from the Korba coalfield of Chhattisgarh. Nandini is an important limestone source, while Balaghat in Madhya Pradesh is associated with manganese supplies.

Rourkela Steel Plant, Odisha: Rourkela Steel Plant was established with the assistance of West German firms, particularly Krupp and Demag, rather than the USSR. Its iron ore requirements have been met from mines such as Barsua, Kalta and Tensa in Odisha. Coal has been sourced from the Jharia and Bokaro coalfields. Birmitrapur is an important limestone-producing area, while manganese is available from mineral-rich areas such as Keonjhar and Sundargarh.

Durgapur Steel Plant, West Bengal: Durgapur Steel Plant was established with the assistance of the United Kingdom. Its location in the industrial belt of West Bengal provided proximity to important raw-material sources. Noamundi and Gua in Jharkhand are important iron-ore sources, while coal has traditionally been obtained from the Raniganj and Jharia coalfields. Birmitrapur in Odisha is associated with limestone supplies. Thus, Durgapur represents British assistance, distinguishing it from Bhilai and Bokaro.

Bokaro Steel Plant, Jharkhand: Bokaro Steel Plant was established with the assistance of the former Soviet Union, under an agreement signed in 1964. It was another major example of Indo-Soviet cooperation in India's public-sector steel industry. Kiriburu and Meghahatuburu in the Jharkhand-Odisha mineral belt are important iron-ore sources. Coal is available from the nearby Bokaro and Jharia coalfields, while limestone is associated with Bhawanathpur and Palamu in Jharkhand and Birmitrapur in Odisha. Kiriburu is also associated with manganese resources.

76. (b)

Statement 1 is correct. Yemen is located at the southwestern tip of the Arabian Peninsula. It has a coastline along the Red Sea to the west and the Gulf of Aden to the south. The Gulf of Aden connects the Arabian Sea with the Bab-el-Mandeb Strait and the Red Sea.

Statement 2 is correct. The Bab-el-Mandeb Strait lies between Yemen on the Arabian Peninsula and the Horn of Africa. Djibouti and Eritrea are situated on the African side of the strait. It connects the Red Sea with the Gulf of Aden and is an important maritime chokepoint.

Statement 3 is incorrect. Socotra Island is part of Yemen and is located in the northwestern Indian Ocean, near the Gulf of Aden, to the southeast of mainland Yemen. It lies off the Horn of Africa and in the Arabian Sea region. Therefore, the statement is incorrect because Socotra is not located in the Gulf of Oman.

Statement 4 is correct. Yemen shares its northern land boundary with Saudi Arabia and its eastern land boundary with Oman. Saudi Arabia and Oman are therefore the two countries sharing land borders with Yemen.



77. (b)

Statement 1 is incorrect. Lake Baikal is not the largest freshwater lake in the world by surface area. Lake Superior holds that distinction. Baikal, however, is the largest freshwater lake by volume, containing an exceptionally large quantity of freshwater.

Statement 2 is correct. Lake Baikal is the deepest lake in the world, reaching a maximum depth of approximately 1,642 metres. It is located in southern Siberia, Russia.

Statement 3 is correct. Lake Baikal is regarded as one of the oldest lakes in the world, with an estimated age of around 25–30 million years. Its long geological history has contributed to its unique and highly endemic biodiversity.

Statement 4 is incorrect. The Moskva River does not originate from Lake Baikal. It is a river in European Russia that flows through Moscow and eventually joins the Oka River. The major river that originates from Lake Baikal is the Angara River.

78. (a)

Lake Superior is the largest freshwater lake in the world by surface area and ranks second among the world's lakes overall after the Caspian Sea. It is shared by Canada and the United States and is the largest of North America's five Great Lakes. It also holds roughly 10% of the world's surface freshwater.

Lake Victoria is Africa's largest lake and the world's largest tropical lake by surface area. It is shared by Tanzania, Uganda and Kenya. The lake is an important source of the White Nile, which emerges from the lake near Jinja in Uganda.

Lake Huron ranks among the world's largest freshwater lakes by surface area and is shared by Canada and the United States. It is linked to Lake Michigan through the Straits of Mackinac. Although the two lakes are regarded as separate geographical lakes, they are hydrologically interconnected and have nearly the same water level.

Lake Michigan is the largest lake situated entirely within a single country, the United States. It is the only Great Lake located completely within the USA and is connected with Lake Huron through the Straits of Mackinac.

79. (b)

The Tarim Basin is a large intermontane basin located in southern Xinjiang, China. It is enclosed by major mountain systems on several sides and is particularly known for the Taklamakan Desert, which occupies much of the basin.

The Kunlun Mountains form the principal southern boundary of the Tarim Basin. They extend along the northern margin of the Tibetan Plateau and separate the Tarim Basin from the Tibetan region.

The Tien Shan Mountains form the northern boundary of the Tarim Basin. They extend across Central Asia and separate the basin from the Junggar Basin farther north.

The Alai Mountains are situated mainly to the west of the Tarim Basin, around the junction of the Pamir and Tien Shan systems. They are therefore not one of the two principal mountain ranges between which the Tarim Basin lies.

The Yablonovy Range is located in eastern Siberia, mainly in Russia. It has no geographical association with the Tarim Basin.

80. (d)

Assertion (A) is TRUE: The North Sea, located at 50-60°N latitude, maintains anomalously high salinity (34-35 ppt) despite climatic conditions that should produce lower salinity. At such high latitudes, cold temperatures, high precipitation, and river discharge (Rhine, Elbe) normally result in freshwater dilution. Yet the North Sea's salinity matches normal ocean levels, creating an apparent contradiction.

Reason (R) is TRUE: The North Atlantic Drift (continuation of the Gulf Stream) transports warm, high-salinity Atlantic water (36-37 ppt) into the North Sea region. This inflowing oceanic water compensates for freshwater inputs, preventing dilution and maintaining the North Sea's high salinity.

Why (R) Correctly Explains (A): The Gulf Stream's influence is the direct causal mechanism resolving the anomaly. Without this warm ocean current, the North Sea would exhibit low salinity like the Baltic Sea (7-8 ppt) at similar latitudes. The North Sea's unexpectedly high salinity exists precisely because Atlantic water continuously flows in, offsetting freshwater effects. This demonstrates that ocean currents, not climate alone, determine regional salinity patterns.

81. (b)

Statement 1 is correct. In the final at **Lord's, London, on 5 July 2026**, **Australia beat England by seven wickets**. They chased 151 (reaching 153/3 in 17.1 overs), the **highest successful chase in a Women's T20 World Cup final**, in front of a record crowd of over 28,000. Australia, captained by **Sophie Molineux**, went through the tournament **unbeaten** and won their **7th Women's T20 World Cup title**. **Beth Mooney** was named Player of the Tournament.

Statement 2 is incorrect. England alone hosted the 2026 edition, which was the **first Women's T20 World Cup with 12 teams**. It was the 10th edition; the first was in 2009, also in England.

Statement 3 is correct. India's 21-year-old left-arm spinner **N. Shree Charani** was the **highest wicket-taker (14 wickets)** and was named in the ICC Team of the Tournament.

Hence option (b).

82. (d)

A-4: At the **139th Wimbledon Championships (29 June – 12 July 2026)**, **Jannik Sinner (Italy)** beat Alexander Zverev (Germany) in the final and **retained his men's singles title**.

B-3: Linda Nosková (Czech Republic) won her **maiden Grand Slam title**, beating compatriot **Karolína Muchová** 6-2, 5-7, 6-3 in an all-Czech women's final.

C-2: The **FIH Men's Hockey World Cup 2026**, co-hosted by **Belgium and the Netherlands** (August 2026), was won by **Germany**, who beat **Spain** in the final and **retained the title they won at Bhubaneswar in 2023**. **India finished 8th** after losing their classification match to Belgium in a shoot-out at Wavre.

D-1: Argentina won the **FIH Women's Hockey World Cup 2026**, beating hosts and defending champions **Netherlands 3-1 in a shoot-out** in the final.

Useful for the exam: India has won the Men's Hockey World Cup **only once, in 1975 (Kuala Lumpur)**, captained by Ajit Pal Singh. India hosted the men's World Cup in 1982 (Bombay), 2010 (New Delhi), 2018 and 2023 (Bhubaneswar and Rourkela). The **FIH** is headquartered in **Lausanne, Switzerland**. Wimbledon is the only Grand Slam played on **grass**, and it is organised by the **All England Lawn Tennis and Croquet Club**. Hence option (d).

83. (a)

A-4: World Water Day (22 March) 2026 had the theme **"Where water flows, equality grows"**, focusing on **water and gender equality**. The day is coordinated by **UN-Water**, and the **UN World Water Development Report** (UNESCO/UN-Water) is launched on this day. World Water Day was first observed in 1993, following a recommendation of the 1992 Rio Earth Summit.

B-2: World Health Day (7 April) marks the founding of the **WHO in 1948**. Its 2026 theme was **"Together for health. Stand with science"**. The 2025 theme was "Healthy beginnings, hopeful futures", on maternal and newborn health.

C-1: International Day for Biological Diversity (22 May) marks the adoption of the text of the **Convention on Biological Diversity (1992)**. Its 2026 theme was **"Acting locally for global impact"**, which links local action to the **23 targets of the Kunming-Montreal Global Biodiversity Framework**.

D-3: National Space Day (23 August) commemorates the **soft landing of Chandrayaan-3's Vikram lander near the lunar south pole on 23 August 2023**; the landing site is named **"Shiv Shakti Point"**. The **3rd National Space Day (2026)** was celebrated at **Ahmedabad** with the theme **"Towards Viksit Bharat: Innovating, Collaborating and Aspiring to Global Space Leadership"**. India now has over 440 space start-ups since the 2020 space-sector reforms.

84. (c)

Statement 1 is correct. The **9th Rashtriya Poshan Maah** was launched on **9 September 2026** at the **Rudraksh International Cooperation and Convention Centre, Varanasi (UP)** by Union Minister for Women and Child Development **Annpurna Devi**. The theme **"Hamari Anganwadi, Hamari Jimmedari"** (Our Anganwadi, Our Responsibility) puts Anganwadi Centres at the centre of community-led action on nutrition and early childhood development.

Statement 2 is incorrect. The **nodal ministry is the Ministry of Women and Child Development (MWCD)**. The Health Ministry works alongside it on convergence activities. The 2026 campaign focuses on dietary diversity and protein intake, fresh hot-cooked meals, community oversight through Anganwadi management committees, early cognitive development, and a **decade of the Pradhan Mantri Matru Vandana Yojana (PMMVY)**.

Statement 3 is correct. POSHAN (Prime Minister's Overarching Scheme for Holistic Nourishment) Abhiyaan was launched on **8 March 2018 at Jhunjhunu, Rajasthan**. Since then, **September is observed as Poshan Maah** and **March–April as Poshan Pakhwada**. The Abhiyaan was later merged into **Mission Saksham Anganwadi & Poshan 2.0** (announced in Budget 2021-22).

85. (b)

Pair 1 is correct. Hayli Gubbi is a shield volcano in the **Afar region of north-eastern Ethiopia**, in the East African Rift. It erupted on **23 November 2025** for the first time in about **10,000–12,000 years**. Its ash plume drifted across the Arabian Sea to **north-west India**, disrupting several flights from Delhi.

Pair 2 is correct. Somaliland is a former British protectorate in the Horn of Africa that **declared independence from Somalia in 1991**. Its capital is **Hargeisa**, and its port **Berbera** lies on the **Gulf of**

Aden, near the Bab-el-Mandeb strait. In **December 2025, Israel became the first UN member state to formally recognise Somaliland** as an independent state; Somalia still claims it as its territory.

Pair 3 is incorrect. The **Tokara Islands** belong to **Japan** (Kagoshima Prefecture) and lie between **Kyushu and the Amami Islands**. They made news after a swarm of more than **1,000 earthquakes** in 2025, a result of their position on the Pacific "Ring of Fire".

Pair 4 is correct. Lake Urmia is a hypersaline, **endorheic (landlocked) lake in north-west Iran**. It has shrunk drastically because of drought, dams and over-extraction, and has become a symbol of Iran's water crisis. It is also a Ramsar site.

Hence option (b).

The **Ramsar Convention (1971)** is named after **Ramsar, a town in Iran**, on the Caspian Sea coast. Bab-el-Mandeb connects the Red Sea with the Gulf of Aden, and the **Strait of Hormuz** connects the Persian Gulf with the Gulf of Oman.

86. (d)

Statement 1 is not correct: As per the recent data, Uttar Pradesh ranks as India's third-largest economy after Maharashtra and Tamil Nadu. According to recent estimates, Uttar Pradesh's GSDP is around ₹30 lakh crore. Tamil Nadu holds the second position, with its Gross State Domestic Product (GSDP) estimated to rise to Rs 35.29 lakh crore, making it India's second-largest economy after Maharashtra.

Statement 2 is not correct: Despite the large overall size of its economy, Uttar Pradesh's **per capita income is well below the all-India average** — indeed among the lower states — because its huge population divides the state income among far more people. This gap between a large aggregate economy and a low per capita income is the central challenge of UP's development.

It illustrates why aggregate GSDP and per capita income can point in opposite directions: a state can rank high in total output yet low in average prosperity. Hence only Statement 1 is correct — option (d).

87. (b)

Statement 1 is not correct: A defining feature of the MSS is that the money mobilised through it is **not available to the Government for expenditure** — it is impounded in a **separate, distinct MSS cash account maintained with the RBI** and used only for the redemption of MSS securities. This is precisely what distinguishes the MSS from ordinary government borrowing.

Statement 2 is correct: The **MSS was introduced in 2004**, under a Memorandum of Understanding between the RBI and the Government, to **absorb excess (durable) liquidity** arising from heavy foreign-exchange/capital inflows, which the RBI's normal Open Market Operations stock of securities was insufficient to mop up.

Under the MSS the RBI issues **Treasury Bills and dated government securities (and Cash Management Bills)** to suck out liquidity; the interest cost is borne by the Government, but the principal never funds the Budget. It thus supplements OMO and the Liquidity Adjustment Facility as a tool of liquidity management. Hence only Statement 2 is correct — option (b).

88. (c)

Statement 1 is correct: The PCA framework is triggered when a bank breaches pre-set risk thresholds on key parameters — chiefly **capital (the Capital to Risk-weighted Assets Ratio / CET-1), asset quality (net NPA ratio)** and, under the revised framework, the leverage ratio. It is a supervisory tool to restore the financial health of weak banks before they reach a point of failure.

Statement 2 is not correct: On the contrary, PCA empowers the RBI to impose **mandatory and discretionary restrictions** — including curbs on **dividend distribution, branch expansion, and fresh lending**, restrictions on management compensation, and directions on capital raising. These restrictions are the very essence of 'corrective action'.

Statement 3 is correct: The RBI's **revised PCA framework (effective from 1 January 2022)** streamlined the parameters for banks, and a separate PCA framework was **extended to government NBFCs and other large NBFCs from October 2022**, reflecting their systemic importance. Hence statements 1 and 3 are correct — option (c).

89. (d)

Statement 1 is correct: The NPS is regulated by the **PFRDA**, a statutory body established under the **PFRDA Act, 2013**. Every subscriber is allotted a unique **Permanent Retirement Account Number (PRAN)**.

Statement 2 is correct: The NPS is a **defined-contribution** scheme — the eventual pension depends on the contributions made and the market returns earned, unlike the old **defined-benefit** pension (which guaranteed a fixed proportion of last-drawn salary). It has a **Tier-I** account (the core pension account, with restricted withdrawal) and an optional **Tier-II** account (a voluntary savings account with free withdrawal).

Statement 3 is correct: Introduced for new central government employees from **2004** (excluding the armed forces) and **opened to all citizens in 2009**, the NPS covers salaried and self-employed persons alike. (The **Unified Pension Scheme (UPS)**, offered to eligible central government employees from April 2025, provides an assured pension as an option within the NPS architecture.) Hence all three statements are correct — option (d).

90. (b)

Option (b) is correct: The **Purchasing Managers' Index (PMI)** is a survey-based indicator of business activity in which a reading **above 50 signals expansion** over the previous month, **exactly 50 signals no change**, and **below 50 signals contraction**. Separate indices are compiled for the **manufacturing** and **services** sectors, and it is watched as a **leading indicator** of the economy's direction.

Option (a) is incorrect — the PMI is compiled and released by a private agency, **S&P Global** (earlier IHS Markit), based on responses from purchasing managers, not by the RBI. **Option (c) is incorrect** — retail inflation is measured by the **Consumer Price Index** released by the NSO, not the PMI. **Option (d) is incorrect** — the fiscal deficit is a budgetary concept, unrelated to the PMI.

Because the PMI is available monthly and quickly, well before official GDP or IIP data, it is valued by analysts and policymakers as an early read on economic momentum.

91. (b)

A-3: the fathom is a unit of length used for measuring the depth of water. One fathom equals 6 feet, about 1.83 metres.

B-1: the knot is a unit of speed used at sea and in aviation. One knot is one nautical mile per hour, about 1.852 km/h. One nautical mile (1,852 m) corresponds to one minute of arc of latitude, which is why it is convenient for navigation.

C-4: one angstrom (Å) equals 10^{-10} m (0.1 nanometre). It is used for wavelengths of light and X-rays and for atomic radii. Visible light spans roughly 4,000 to 7,000 Å.

D-2: the parsec is an astronomical unit of distance equal to about 3.26 light years (about 3.09×10^{13} km).

Option (a) wrongly links the fathom with speed, option (c) swaps the angstrom and the parsec, and option (d) swaps the fathom and the angstrom. Hence option (b).

The order of astronomical distance units from smallest to largest is Astronomical Unit (mean Earth-Sun distance, about 1.496×10^8 km) < light year (about 9.46×10^{12} km) < parsec. Very small lengths: micron = 10^{-6} m; nanometre = 10^{-9} m; fermi = 10^{-15} m, used for the size of an atomic nucleus. Other units that are commonly tested: the barrel (crude oil, about 159 litres), the carat (mass of gems, 200 mg; also purity of gold, 24 carat being pure), the bar (atmospheric pressure) and the decibel (loudness of sound).

92. (a)

Statement 1 is correct: Kepler's second law (law of areas) states that the line joining a planet to the Sun sweeps equal areas in equal times. To cover an equal area when the line is shorter, the planet must move faster, so orbital speed is greatest at perihelion and least at aphelion. The law follows from conservation of angular momentum.

Statement 2 is incorrect: the Earth reaches perihelion around 3 January, at about 147 million km from the Sun. It reaches aphelion, its farthest point (about 152 million km), around 4 July. Since only statement 1 is correct, the answer is option (a).

Kepler's first law (law of orbits) says every planet moves in an elliptical orbit with the Sun at one focus. His third law (law of periods) says the square of a planet's orbital period is proportional to the cube of the semi-major axis of its orbit ($T^2 \propto a^3$), so distant planets take much longer to go round the Sun: Mercury about 88 days, Neptune about 165 years. The seasons are caused by the 23.5° tilt of the Earth's axis, not by its changing distance from the Sun; the northern hemisphere has winter when the Earth is closest to the Sun. Because the Earth moves faster near perihelion, the northern summer half-year (March equinox to September equinox) is about a week longer than the winter half-year. Newton later explained Kepler's laws through his law of universal gravitation; the gravitational constant G (6.67×10^{-11} N m^2 kg^{-2}) was first measured by Henry Cavendish.

93. (c)

Statement 1 is correct: in liquids, viscosity arises mainly from cohesive forces between molecules. Heating weakens these forces, so hot honey, ghee or engine oil flows more easily than cold.

Statement 2 is incorrect: in gases, viscosity arises from the transfer of momentum by molecules moving between layers. On heating, molecules move faster and transfer more momentum, so the viscosity of a gas increases with temperature. This opposite behaviour of liquids and gases is a favourite examination trap.

Statement 3 is correct: as a drop falls, the viscous drag on it grows with its speed until drag plus buoyancy equals its weight. The net force then becomes zero and the drop falls with a constant terminal velocity. Since statements 1 and 3 are correct, the answer is option (c).

94. (a)

A is true: armies have long followed the practice of breaking step on bridges. The Broughton Suspension Bridge near Manchester, England, collapsed in 1831 while soldiers were marching across it in step, and the British Army afterwards adopted the rule.

R is true and correctly explains A: every structure has a natural frequency of vibration. When an external periodic force acts at the same frequency, energy is absorbed at every cycle and the amplitude keeps growing. This is resonance. Marching in step applies exactly such a periodic force, so breaking step removes the risk. Hence option (a).

Other examples of resonance are tuning a radio or TV set (the circuit is adjusted to resonate with the frequency of the desired station), a singer's sustained high note shattering a wine glass, and the swelling of sound in a resonance tube. The three characteristics of a musical sound are pitch (depends on frequency), loudness (depends on amplitude; measured in decibels) and quality or timbre (depends on the waveform). The audible range of human hearing is about 20 Hz to 20,000 Hz. Sound below 20 Hz is infrasonic (produced by earthquakes, and used by elephants and whales), and sound above 20,000 Hz is ultrasonic (used by bats and dolphins, and in SONAR and ultrasonography). Sound is a mechanical, longitudinal wave in air and cannot travel through a vacuum.

95. (d)

Statement 1 is correct: most liquids contract on cooling, but water contracts only down to 4°C and then expands between 4°C and 0°C (anomalous expansion). In winter, the densest water at 4°C sinks to the bottom of a lake, the surface freezes first, and the layer of ice (a poor conductor of heat) insulates the water below, so fish and other aquatic life survive.

Statement 2 is correct: the relation between the scales is $F = (9/5)C + 32$. Putting $F = C$ gives $C = -40$, so -40°C and -40°F are the same temperature.

Statement 3 is correct: water needs much more heat than land to change its temperature (about 4,186 J per kg per °C, or 1 calorie per gram per °C). The sea therefore heats and cools slowly, which keeps coastal summers cooler and winters milder and gives rise to land and sea breezes. All three statements are correct, so the answer is option (d).

Kelvin temperature = Celsius temperature + 273.15; absolute zero is 0 K, which is -273.15°C or -459.67°F.

96. (b)

Statement 1 is incorrect: according to Rayleigh's law, the amount of scattering is inversely proportional to the fourth power of the wavelength. Red light, having the longest wavelength in the visible band, is

scattered the least, while blue is scattered the most. At sunrise and sunset, sunlight passes through a much thicker layer of air, most of the blue light is scattered away, and mainly the less-scattered red and orange light reaches the eye.

Statement 2 is correct: the density of the atmosphere increases towards the Earth's surface, so light from the Sun bends as it enters the atmosphere. When the Sun is actually just below the horizon, its refracted light already reaches us. This advances the apparent sunrise and delays the apparent sunset by about two minutes each, lengthening the day by about four minutes. Since only statement 2 is correct, the answer is option (b).

The sky looks blue because blue light is scattered strongly by air molecules; to an astronaut in space, the sky appears black because there is no atmosphere to scatter light. Danger signals are red because red light is scattered least and can be seen from far away, even through fog or smoke. Clouds look white because their water droplets are large enough to scatter all colours almost equally. Atmospheric refraction also makes the Sun look slightly flattened (oval) near the horizon and causes stars to twinkle, whereas planets, being much nearer and appearing as small discs, generally do not twinkle.

97. (d)

Statement 1 is incorrect: about 97% of the oxygen is carried by haemoglobin in the red blood cells as oxyhaemoglobin; only about 3% travels dissolved in the plasma. Each haemoglobin molecule can carry up to four molecules of oxygen.

Statement 2 is incorrect: only about 20 to 25% of carbon dioxide is carried as carbaminohaemoglobin. About 70% is carried as bicarbonate ions (HCO_3^-), formed quickly inside red blood cells with the help of the enzyme carbonic anhydrase, and about 7% travels dissolved in the plasma. Since both statements are incorrect, the answer is option (d).

98. (c)

Statement 1 is correct: JE is caused by a flavivirus. It is spread mainly by mosquitoes of the Culex tritaeniorhynchus group, which breed in paddy fields and other stagnant water, so cases rise during and after the monsoon.

Statement 2 is incorrect: domestic pigs and wild birds act as amplifying hosts, and water birds such as herons and egrets are natural reservoirs. Humans are dead-end hosts: the level of virus in human blood is too low to infect a biting mosquito, and JE does not spread from person to person.

Statement 3 is correct: JE vaccination is included in the Universal Immunisation Programme in endemic districts, with doses given in early childhood. Since statements 1 and 3 are correct, the answer is option (c).

JE is one of the main causes of Acute Encephalitis Syndrome (AES), which for years caused heavy loss of children's lives in Gorakhpur and neighbouring districts. In February 2018, the Uttar Pradesh government launched the 'Dastak' campaign with UNICEF against AES and JE, a door-to-door drive combining awareness, sanitation, clean drinking water, vaccination and early treatment. Other vector links to remember: Anopheles (malaria), Aedes (dengue, chikungunya, Zika), Culex (JE and filariasis), sandfly (kala-azar) and tsetse fly (sleeping sickness). Other flavivirus diseases include dengue, yellow fever and Zika.

99. (d)

Statement 1 is correct: bacteria in the mouth break down sugar and food particles left on the teeth and produce acids. Below a pH of about 5.5, tooth enamel (made of calcium hydroxyapatite) begins to dissolve. Toothpastes are generally basic so that they neutralise this acid, and fluoride strengthens enamel by forming the more acid-resistant fluorapatite.

Statement 2 is correct: milk of magnesia is $Mg(OH)_2$. It is a mild base that neutralises the excess hydrochloric acid of the stomach in hyperacidity (indigestion).

Statement 3 is correct: most crops grow best at a pH of roughly 6 to 7.5. Acidic soils, common in high-rainfall areas such as the north-eastern states and the laterite belts, are treated with basic substances such as quicklime (CaO), slaked lime ($Ca(OH)_2$) or chalk and limestone ($CaCO_3$). All three statements are correct, so the answer is option (d).

Alkaline or sodic soils (usar or reh soils of Uttar Pradesh) are treated the opposite way, with gypsum. Other antacids include aluminium hydroxide and sodium hydrogen carbonate (baking soda). The sting of an ant or bee contains methanoic (formic) acid, and applying mild bases such as baking soda is the traditional remedy.Sodium hydroxide and potassium hydroxide are strong bases (alkalis); magnesium hydroxide is a weak, sparingly soluble base, which is why it is safe to swallow. Gastric juice is strongly acidic, with a pH of roughly 1.5 to 3.5. Rain water is considered acid rain when its pH falls below about 5.6.

100.(b)

Pair 1 is correct: cinnabar is mercury sulphide (HgS), the chief ore of mercury.

Pair 2 is correct: galena is lead sulphide (PbS), the chief ore of lead.

Pair 3 is correct: calamine is zinc carbonate ($ZnCO_3$), an important ore of zinc; zinc blende (ZnS) is the other main zinc ore.

Pair 4 is incorrect: cryolite (Na_3AlF_6) is a mineral of aluminium, not copper. It is used in the electrolytic extraction of aluminium (Hall-Héroult process) to lower the melting point of alumina and improve conductivity. The main ores of copper are chalcopyrite (copper pyrites, $CuFeS_2$), cuprite and malachite. Since pairs 1, 2 and 3 are correct, the answer is option (b).

Every ore is a mineral, but not every mineral is an ore; an ore is a mineral from which a metal can be extracted profitably. Sulphide ores are concentrated by froth flotation and then roasted (heated strongly in excess air); carbonate ores are calcined (heated in limited or no air). Very reactive metals such as sodium, potassium, calcium, magnesium and aluminium are extracted by electrolysis of their molten compounds. Gold and platinum are so unreactive that they occur in the free (native) state. Bauxite is the chief ore of aluminium; haematite and magnetite are ores of iron.

101.(c)

Khurda Rebellion (1817): The Khurda Rebellion, also known as the Paika Rebellion, broke out in Odisha in 1817 under the leadership of Bakshi Jagabandhu. It was directed against British rule and involved the Paikas and other sections of the local population.

Khond Rebellion (1837–1856): The Khond resistance occurred in the tribal regions of Odisha and adjoining areas during the 1830s to 1850s. The British attempted to extend administrative control and suppress practices associated with Khond society, leading to prolonged resistance.

Indigo Revolt (1859–1860): The Indigo Revolt began in Bengal in 1859, when peasants resisted the coercive cultivation of indigo imposed by European planters. The movement spread across several districts and compelled the colonial administration to appoint the Indigo Commission in 1860.

Pabna Movement (1873–1876): The Pabna agrarian movement developed in Pabna district of Bengal against zamindars' attempts to enhance rents and impose illegal cesses. Peasants organised themselves through associations and largely adopted peaceful and legal methods of resistance.

102.(c)

Shalabhoga refers to land assigned for the maintenance of a school. Such land grants provided revenue for the functioning and upkeep of educational institutions.

Pallichchandam refers to land donated to Jain institutions. The term palli was associated with Jain religious establishments, and such grants supported their maintenance.

Vellanvagai refers to land held by non-Brahmana peasant proprietors. It represented ordinary peasant-owned agricultural land and was distinct from specific categories of land granted to Brahmanas or religious institutions.

Tirunamattukkani refers to land gifted to temples, generally as a religious endowment. The revenue from such land could support temple activities and maintenance.

103.(a)

Pair 1 is not correctly matched. The All India Depressed Classes Congress was associated with Dr. B. R. Ambedkar, particularly its important conference at Nagpur in 1930. Jagjivan Ram was instead prominently

associated with the All India Depressed Classes League. Therefore, pairing the Depressed Classes Congress with Jagjivan Ram is incorrect.

Pair 2 is correctly matched. The All India Depressed Classes Association was associated with M. C. Rajah, an important leader of the Depressed Classes movement from South India. Rajah played a prominent role in organising the Depressed Classes politically and represented their interests in colonial legislative institutions.

Pair 3 is not correctly matched. The All India Depressed Classes League was associated with Jagjivan Ram, who played a leading role in its formation and activities during the 1930s. Therefore, associating the League with Dr. B. R. Ambedkar is incorrect.

Pair 4 is correctly matched. The All India Scheduled Castes Federation was founded by Dr. B. R. Ambedkar in 1942. It became an important political organisation representing the interests of the Scheduled Castes and was directly associated with Ambedkar's political activities.

104.(a)

Elections held in India — 2: The Central and Provincial Legislative Assembly elections were held in 1945–46. The provincial elections took place in January–February 1946. The Indian National Congress performed strongly in the general constituencies, while the Muslim League secured overwhelming support in the Muslim-reserved constituencies.

Royal Indian Navy Revolt — 1: The Royal Indian Navy Revolt began on 18 February 1946 in Bombay when ratings of HMIS Talwar went on strike. The revolt spread to several naval establishments and ships in Bombay and other centres. It became a significant manifestation of growing discontent against British rule.

Cabinet Mission Report/Proposals — 3: The Cabinet Mission, comprising Lord Pethick-Lawrence, Sir Stafford Cripps and A. V. Alexander, arrived in India in 24 march 1946. After negotiations with Indian political leaders, it presented its constitutional proposals on 16 May 1946. The plan proposed a united Indian Union with a limited central authority and provincial groupings.

Direct Action Day — 5: The Muslim League observed Direct Action Day on 16 August 1946 after its decision to withdraw acceptance of the Cabinet Mission Plan. The day was followed by severe communal violence, particularly in Calcutta, marking a major deterioration in relations between the Congress and Muslim League.

Muslim League joined the Interim Government — 4: The Muslim League eventually joined the Interim Government on 26 October 1946. Liaquat Ali Khan became the Finance Member, while other League representatives were given portfolios. The League's entry did not end the political conflict between it and the Congress.

105.(c)

The Bhauma-Kara dynasty, which ruled in Odisha between the 8th and 10th centuries CE, is particularly notable for having six or seven sovereign queens regnant who ruled independently.

Tribhuvana Mahadevi I, also known as Paramavaishnavi Goswamini Devi, was the first prominent female ruler of the dynasty. She ascended the throne around 843–845 CE following the premature death of her son, Subhakara III. She restored political stability and was recognised as a powerful sovereign.

Tribhuvana Mahadevi II, identified with Prithivi Mahadevi, ruled approximately from 890 to 896 CE. She belonged to the Bhauma-Kara lineage and ruled as a queen regnant in Toshala.

Tribhuvana Mahadevi III ruled approximately from 896 to 905 CE. She was the wife of Sivakara III and exercised sovereign authority as a queen regnant.

Gauri Mahadevi ruled after her husband, Subhakaradeva V, and before the reign of her daughter. She is noted for her political role in the later Bhauma-Kara period.

Dandi Mahadevi, the daughter of Gauri Mahadevi and Subhakaradeva V, succeeded to the throne and is regarded as a capable and influential ruler.

Vakula Mahadevi, the stepmother of Dandi Mahadevi and a princess of the Bhanja dynasty, subsequently occupied the Bhauma-Kara throne around 936–940 CE.

Dharma Mahadevi is generally regarded as the last recorded ruler of the Bhauma-Kara dynasty. She ruled during the mid-10th century CE, approximately 940–950 CE.

The succession of these female rulers makes the Bhauma-Kara dynasty especially significant in the political history of early medieval India, as several queens exercised independent sovereign authority rather than merely acting as royal consorts.

106.(a)

Pair 1 is not correctly matched. The tomb of Sheikh Salim Chishti is located at Fatehpur Sikri, near Agra, Uttar Pradesh, and not at Khuldabad. His tomb is a prominent white marble structure within the Jama Masjid complex at Fatehpur Sikri.

Pair 2 is not correctly matched. The tomb of Itmad-ud-Daula, built by Nur Jahan for her father Mirza Ghiyas Beg, is located in Agra, Uttar Pradesh, and not at Fatehpur Sikri. It is often regarded as an important precursor to the architectural style later seen in the Taj Mahal.

Pair 3 is not correctly matched. The tomb of Aurangzeb is located at Khuldabad, near Chhatrapati Sambhajinagar in Maharashtra, and not in Agra. Unlike the grand Mughal mausoleums, Aurangzeb's grave is known for its unusually simple form.

Pair 4 is correctly matched. The tomb of Abdur Rahim Khan-i-Khanan, the celebrated Mughal noble and poet better known as Rahim, is located in Nizamuddin East, Delhi. The tomb was originally built by Rahim for his wife and was later used for his own burial.

107.(c)

Futuh-us-Salatin, written by Isami (Abd al-Malik Isami) around 1350 CE, contains an early literary reference to the charkha (spinning wheel) and the rahat (Persian wheel) in medieval India. Isami composed the work during the period of the Delhi Sultanate and provides information on the political, social and economic conditions of the time.

The charkha was used for spinning yarn and became an important device in textile production. Its adoption contributed to greater efficiency in spinning compared with earlier hand-spinning methods.

The rahat, or Persian wheel, was a water-lifting device used particularly for irrigation. It enabled water to be raised from wells and supplied to agricultural fields, facilitating more intensive cultivation.

Akbarnama — Written by **Abul Fazl** during Akbar's reign, much later than the period in which the charkha is first referenced.

108.(b)

Statement 1 is not correct: Income elasticity of demand (percentage change in quantity demanded divided by percentage change in income) is **positive for normal goods but negative for inferior goods** — as income rises, demand for inferior goods (such as coarse cereals) actually falls. Hence it is not 'always positive'. (For luxuries it is greater than one.)

Statement 2 is correct: Cross-price elasticity measures the responsiveness of demand for one good to a change in the price of another. For **substitute goods** (e.g., tea and coffee) it is **positive** — a rise in the price of coffee raises the demand for tea.

Statement 3 is correct: For **complementary goods** (e.g., car and petrol) the cross-price elasticity is **negative** — a rise in the price of cars reduces the demand for petrol. For unrelated goods it is approximately zero. Hence statements 2 and 3 are correct — option (b).

109.(d)

Statement 1 is incorrect. Harivijaya Suri was a prominent Jain monk of the Tapa Gaccha tradition who visited the court of Akbar. Akbar showed considerable respect towards him and his teachings, particularly those concerning non-violence and compassion towards living beings. Harivijaya Suri was honoured with the title "Jagadguru", meaning "world teacher", and not "Yug Pradhan."

Statement 2 is incorrect. Jin Chandra Suri, a prominent Jain scholar associated with the Mughal court, was honoured with the title "Yug Pradhan", and not "Jagadguru." The title recognised his position and influence within the Jain religious tradition.

110.(a)

The Lahore Session of 1909 was presided over by Madan Mohan Malaviya. This session was held against the background of the political developments following the Morley-Minto Reforms and growing debates over constitutional reforms and political representation.

The Karachi Session of 1913 was presided over by Syed Muhammad Bahadur. He was a prominent Congress leader from Madras and became the first Muslim president of the Congress from South India.

The Madras Session of 1914 was presided over by Bhupendra Nath Bose. He was associated with the moderate political tradition of the Congress and later became president of the organisation.

The Bombay Session of 1915 was presided over by Satyendra Prasanna Sinha. He was a distinguished lawyer and statesman and was the first Indian to serve on the Viceroy's Executive Council.

111.(d)

Article 243R deals with the composition of municipalities. It provides for representation of persons directly elected to municipal seats and also permits representation of specified categories through State legislation.

Statement 1 is correct. Members of the Lok Sabha representing constituencies that comprise wholly or partly the municipal area are represented in the municipality as provided under Article 243R.

Statement 2 is correct. Members of the State Legislative Assembly representing constituencies that comprise wholly or partly the municipal area are also represented.

Statement 3 is correct. Where a State has a Legislative Council, members of that Council registered as electors within the municipal area can be represented in the municipality.

Statement 4 requires particular attention. Article 243R(2)(b) permits State legislation to provide for the representation of persons having special knowledge or experience in municipal administration. Such persons may be nominated or otherwise represented according to State law. They do not have a right to vote in municipal meetings merely by virtue of such representation.

112.(d)

The A. K. Gopalan v. State of Madras (1950) case was primarily concerned with preventive detention and the interpretation of Article 21. The Supreme Court examined whether deprivation of personal liberty through preventive detention complied with the constitutional requirement of "procedure established by law." Hence, A–4 is correctly matched.

The Kedarnath Singh v. State of Bihar (1962) case dealt with the constitutional validity of the sedition provision under Section 124A of the Indian Penal Code in relation to the freedom of speech and expression under Article 19(1)(a). The Supreme Court upheld the provision subject to its restricted application to acts involving incitement to violence or public disorder. Hence, B–3 is correctly matched.

The I. R. Coelho v. State of Tamil Nadu (2007) case concerned the scope of judicial review over laws placed in the Ninth Schedule. The Supreme Court held that laws inserted into the Ninth Schedule after 24 April 1973 could be examined by the courts if they violated the basic structure of the Constitution. Hence, C–2 is correctly matched.

The Kihoto Hollohan v. Zachillhu (1992) case concerned the constitutional validity of the anti-defection law contained in the Tenth Schedule. The Supreme Court upheld the validity of the Tenth Schedule while recognising judicial review of decisions made by the Speaker or Chairman under it. Hence, D–1 is correctly matched.

113.(a)

Statement 1 is incorrect. The power to declare an area as a Scheduled Area does not lie with the Gram Sabha. Scheduled Areas are declared by the President of India under the Fifth Schedule of the Constitution.

Statement 2 is correct. PESA gives the Gram Sabha and Panchayats at the appropriate level powers relating to the management of community resources.

Statement 3 is incorrect. PESA provides for the ownership of minor forest produce to Gram Sabhas or Panchayats at the appropriate level. It is not vested in a Joint Forest Management Committee constituted by the Governor.

Statement 4 is incorrect. PESA was enacted to extend Part IX of the Constitution relating to Panchayats to the Scheduled Areas referred to in Article 244(1), with specified modifications and exceptions. It is therefore specifically concerned with Fifth Schedule areas, rather than excluding them.

114.(a)

Article 153 — Governor of States. Article 153 provides that there shall be a Governor for each State. It also permits the same person to be appointed as Governor of two or more States.

B–4: Article 154 — Executive power of the State. Article 154 vests the executive power of the State in the Governor, to be exercised either directly or through officers subordinate to him in accordance with the Constitution.

C–2: Article 155 — Appointment of Governor. Article 155 provides that the Governor of a State is appointed by the President of India by warrant under his hand and seal.

D–1: Article 156 — Term of office of Governor. Article 156 provides that the Governor holds office during the pleasure of the President. The normal term is five years, but the Governor may continue in office until the successor enters upon office.

115.(c)

Statement 1 is incorrect. The Constitution does not debar retiring Election Commissioners from receiving further government appointments. Article 324 primarily deals with the composition, appointment and conditions of service of the Election Commission; it does not impose such a general prohibition.

Statement 2 is incorrect. In the Anoop Baranwal v. Union of India (2023) case, the Supreme Court dealt mainly with the appointment mechanism of the Chief Election Commissioner and Election Commissioners. It did not direct that Regional Election Commissioners be placed on the same footing as Election Commissioners regarding removal.

Statement 3 is correct. The Election Commission was initially a single-member body headed by the Chief Election Commissioner. Although two Election Commissioners were appointed briefly in 1989, the Commission reverted to a single-member body in 1990. In October 1993, two Election Commissioners were appointed again, and since then the ECI has functioned as a multi-member body.

Statement 4 is correct. Article 324(1) vests in the Election Commission the superintendence, direction and control of elections to Parliament and State Legislatures and to the offices of the President and Vice-President of India.

116.(b)

Article 47 directs the State to raise the level of nutrition and standard of living and improve public health. It also seeks prohibition of intoxicating drinks and drugs injurious to health.

Article 46 directs the State to promote the educational and economic interests of weaker sections, particularly the Scheduled Castes and Scheduled Tribes, and protect them from social injustice and exploitation.

Article 45 provides for early childhood care and education for children below six years of age.

Article 48 directs the State to organise agriculture and animal husbandry on modern and scientific lines and to preserve and improve breeds of cattle.

117.(c)

Assertion (A) is correct: The **'twin deficits'** refer to the coexistence of a **fiscal deficit** (the Government spending more than its non-borrowed receipts) and a **current account deficit** (the country importing more goods, services and transfers than it exports). The 'twin deficit hypothesis' suggests that a large fiscal deficit can widen the current account deficit by boosting demand for imports.

Reason (R) is correct: The **'twin balance sheet problem'** — a term popularised by the Economic Survey (under Chief Economic Adviser Arvind Subramanian) — describes the **simultaneous stress on the balance sheets of banks (rising NPAs) and of heavily indebted corporates**, which together choke fresh investment and credit.

Both statements are individually correct, but they define **two entirely different concepts**; the Reason describes the twin balance sheet problem and does **not** explain the twin deficits of the Assertion. Hence both are true but (R) is not the correct explanation of (A) — option (c).

118.(d)

Statement 1 is correct: Merit goods are goods and services that society judges people should consume regardless of their ability or willingness to pay. Because individuals tend to under-value the private and social benefits, merit goods are **under-consumed if provision is left purely to the market** — a form of market failure.

Statement 2 is correct: Governments subsidise or directly provide merit goods because their consumption yields **positive externalities** — an educated, healthy, vaccinated population benefits the whole of society, not just the individual consumer.

Statement 3 is correct: Education and healthcare are the textbook examples of merit goods. Their opposite, **demerit goods** (such as tobacco and alcohol), generate negative externalities and are over-consumed, so the state discourages them through taxes and regulation. Merit goods are distinct from **public goods**, which are non-rival and non-excludable. Hence all three statements are correct — option (d).

119.(d)

Option (d) is correct: Consumer surplus is the **difference between the maximum price a consumer is willing to pay for a good and the price actually paid** in the market. Geometrically, it is the area **below the demand curve and above the market price line**. The concept, developed by **Alfred Marshall** (building on Dupuit), measures the net benefit or welfare a consumer derives from a purchase.

Option (a) describes a firm's profit; **option (b)** describes the marginal product of a factor; and **option (c)** describes inventories/unsold stock — none of these is consumer surplus.

The mirror-image concept on the seller's side is **producer surplus** — the difference between the price a producer actually receives and the minimum price at which it would have been willing to supply. The sum of consumer and producer surplus measures the total welfare generated by a market, a central idea in welfare economics.

120.(b)

Assertion (A) is correct: The demand curve for a normal good is **downward-sloping**, showing the inverse relationship between price and quantity demanded — at lower prices, consumers buy more.

Reason (R) is correct: This is the **Law of Diminishing Marginal Utility (DMU)** — as a person consumes more units of a good, the **satisfaction (marginal utility) from each additional unit falls**. A consumer will therefore buy an extra unit only if its price falls to match the lower marginal utility, which is exactly why the demand curve slopes downward.

Since DMU provides the fundamental explanation for the shape of the demand curve, **(R) is the correct explanation of (A)** — option (b). The law is also known as **Gossen's First Law**, and it underlies the consumer's equilibrium condition that utility is maximised where the ratio of marginal utility to price is equalised across all goods.

121.(b)

Statement 1 is incorrect: identical (monozygotic) twins develop from a single fertilised egg and have the same DNA, so standard DNA fingerprinting cannot tell them apart. This is a well-known limitation of the technique.

Statement 2 is correct: about 99.9% of the DNA of any two people is identical. DNA fingerprinting examines regions where short sequences are repeated a different number of times in different people (VNTRs or minisatellites, and STRs or short tandem repeats), producing a band pattern that is unique to each individual (identical twins being the only exception). Since only statement 2 is correct, the answer is option (b).

DNA fingerprinting was developed by Alec Jeffreys at the University of Leicester, UK, in 1984. The classical method uses restriction enzymes, gel electrophoresis, Southern blotting and labelled probes; PCR

is now used to amplify DNA from very small samples such as a single hair root, a drop of blood or saliva. In India, Dr Lalji Singh developed the technique at the Centre for Cellular and Molecular Biology (CCMB), Hyderabad, and is called the father of DNA fingerprinting in India; the Centre for DNA Fingerprinting and Diagnostics (CDFD) is also in Hyderabad. Uses include paternity disputes, identifying criminals and disaster victims, and wildlife forensics. In January 2025, data from 10,000 genomes sequenced under the Genome India Project, funded by the Department of Biotechnology, was released for research.

122.(d)

A is false: methanol (CH_3OH, also called wood spirit) is highly poisonous. Even small amounts can cause permanent blindness, and slightly larger amounts can be fatal. Most 'hooch tragedies' involving spurious liquor are caused by methanol contamination.

R is true: the liver enzyme alcohol dehydrogenase converts methanol into formaldehyde, which is further converted into formic acid. Formic acid causes severe acidosis and damages the optic nerve and retina. Since A is false and R is true, the answer is option (d).

Ethanol (C_2H_5OH, grain alcohol) is the alcohol present in alcoholic drinks. It is produced by the fermentation of sugars, chiefly from sugarcane molasses, using yeast, which supplies the enzymes invertase and zymase. Because the enzyme that breaks down methanol prefers ethanol, ethanol (or the drug fomepizole) is given as an antidote in methanol poisoning. Rectified spirit contains about 95% ethanol; absolute alcohol is 100% ethanol. Denatured spirit is ethanol made unfit for drinking by adding methanol, pyridine and colouring agents, so that industrial alcohol cannot be diverted for drinking. Ethanol blended with petrol is known as power alcohol.

123.(a)

Statement 1 is correct: the DRDO carried out the maiden flight tests of the IADWS on 23 August 2025 off the Odisha coast. Three targets (two high-speed fixed-wing drones and one multicopter drone) were destroyed at the same time at different ranges and altitudes.

Statement 2 is correct: the IADWS is a multi-layered air defence system that combines QRSAM, VSHORADS and a high-power laser-based Directed Energy Weapon (DEW), all linked through a centralised command and control centre.

Statement 3 is incorrect: the laser DEW was developed by the Centre for High Energy Systems and Sciences (CHESS). The Research Centre Imarat (RCI) developed VSHORADS, and the Defence Research and Development Laboratory (DRDL) developed the centralised command and control centre. All three laboratories are in Hyderabad. Since statements 1 and 2 are correct, the answer is option (a).

On Independence Day 2025, the Prime Minister announced 'Mission Sudarshan Chakra' to build a nationwide multi-layered shield against aerial threats by 2035. A Directed Energy Weapon destroys or disables a target with concentrated energy such as a laser beam; its cost per shot is very low compared with a missile, which makes it well suited against cheap drones. VSHORADS is a man-portable air defence system (MANPADS). For comparison, Iron Dome is Israel's short-range air defence system, and Akash is India's indigenous medium-range surface-to-air missile.

124.(a)

Statement 1 is correct: lysosomes are membrane-bound sacs of digestive (hydrolytic) enzymes formed from the Golgi apparatus. They digest worn-out organelles and foreign material; if a damaged cell's lysosomes burst, the enzymes digest the cell itself, hence the name 'suicide bags'. They were discovered by Christian de Duve.

Statement 2 is correct: ribosomes have no membrane and occur in all living cells. Prokaryotes (bacteria) have smaller 70S ribosomes, eukaryotes have 80S ribosomes in the cytoplasm, and mitochondria and chloroplasts also contain 70S ribosomes of their own. George Palade first described them, and they are also called 'Palade granules'.

Statement 3 is incorrect: centrioles are found in animal cells, where they help organise the spindle during cell division, but they are absent in most higher plant cells, which form their spindle without centrioles. Since statements 1 and 2 are correct, the answer is option (a).

125.(d)

A-2: The potato is an underground stem tuber that stores starch. Its 'eyes' are nodes bearing buds, a feature of stems and not roots, which is how we know the potato is a stem even though it grows below the ground.

B-1: The sweet potato (shakarkand) is a swollen adventitious root that stores food; unlike the potato, it does not have nodes and internodes.

C-4: The edible head of the cabbage is a large terminal bud made of tightly packed leaves.

D-3: the edible part of the cauliflower (and of broccoli) is its compact inflorescence.

Option (a) interchanges potato and sweet potato, option (b) interchanges cabbage and cauliflower, and option (c) wrongly treats the sweet potato as leaves and cabbage as root. Hence option (d).

Modified tap roots include the carrot (conical), radish (spindle-shaped) and turnip and beetroot (top-shaped). Underground stems include ginger and turmeric (rhizome), onion and garlic (bulb, in which the fleshy leaves are eaten) and colocasia or arbi (corm). Clove is a dried flower bud, saffron is the dried stigma of the flower, the fleshy part of the mango is the mesocarp, coconut water and kernel are endosperm, the edible part of the litchi is an aril, and in the apple the fleshy part is the thalamus, which is why it is called a false fruit.

126.(c)

Pair 1 is correctly matched: Banni, on the southern edge of the Great Rann of Kutch in **Gujarat**, is one of Asia's finest natural grasslands (about 3,800 sq km). It was declared a protected forest in 1955 and is grazed by the pastoral **Maldhari** community. Its biggest threat is the invasive shrub **Prosopis juliflora**.

Pair 2 is correctly matched: Bugyals are high-altitude **alpine meadows of Uttarakhand**, lying roughly between 3,300 and 4,000 m. Well-known examples are **Dayara, Bedni and Auli**. They are snow-bound in winter and used for summer grazing.

Pair 3 is NOT correctly matched: Shola grasslands occur in the high ranges of the **Western Ghats** (Nilgiris, Anamalai, Palani hills), where rolling grasslands alternate with patches of stunted evergreen **shola forest** in the valleys. They are not found in the Thar Desert.

Pair 4 is correctly matched: In Kashmiri, **marg** means meadow; hence **Gulmarg** (meadow of flowers) and **Sonamarg** (meadow of gold).

Grasslands are among India's most neglected ecosystems; they were long classed as "wastelands" in official land records. They are the home of the **Great Indian Bustard, the lesser florican and the blackbuck**. The **Terai grasslands** of Uttar Pradesh (Dudhwa) support the swamp deer and the one-horned rhinoceros.

Hence three pairs are correctly matched, and option (c) is correct.

127.(b)

Pair 1 is correctly matched: The **clouded leopard** is the State animal of **Meghalaya**.

Pair 2 is correctly matched: The **mithun (gayal)**, a semi-domesticated bovine of the north-eastern hills, is the State animal of **Nagaland** and also of **Arunachal Pradesh**.

Pair 3 is NOT correctly matched: The **fishing cat**, a wetland cat, is the State animal of **West Bengal**. Kerala's State animal is the **Indian elephant**.

Pair 4 is NOT correctly matched: The **Himalayan serow**, a goat-antelope, is the State animal of **Mizoram**. Sikkim's State animal is the **red panda**.

Hence two pairs are correctly matched, and option (b) is correct.

> Other State animals often asked: **Uttar Pradesh**, swamp deer (barasingha); **Uttarakhand**, alpine musk deer; **Himachal Pradesh**, snow leopard; **Assam**, one-horned rhinoceros; **Rajasthan**, chinkara; **Manipur**, sangai; **Tripura**, Phayre's langur. The **tiger** is the National Animal, the **elephant** the National Heritage Animal and the **Gangetic dolphin** the National Aquatic Animal.

128.(d)

Statement 1 is correct: The notification of **31 December 2021**, issued under the **Environment (Protection) Act, 1986**, mandates **100 per cent utilisation of fly ash** in an eco-friendly manner by coal- and lignite-based thermal power plants, within set compliance cycles.

Statement 2 is correct: Applying the **polluter pays principle**, non-compliant plants must pay environmental compensation of **₹1,000 per tonne** of unutilised ash. The amount is collected by the **Central Pollution Control Board** and used for safe disposal of ash and related research.

Statement 3 is correct: Fly ash consists mainly of **silica, alumina, iron oxide and lime**. It is **pozzolanic**, meaning it reacts with lime in the presence of water to form cementing compounds. It is widely used in **Portland Pozzolana Cement, fly ash bricks and blocks, road embankments and the filling of mine voids**.

Fly ash is the fine residue collected from the flue gases of coal-fired power plants; Indian coal has a **high ash content** (commonly 30 to 45 per cent), so the volumes generated are huge. Unmanaged ash ponds pollute air and water, and fly ash can carry traces of **heavy metals such as arsenic, lead and mercury**. India's first fly ash notification was issued in **1999**.

Hence option (d) is correct.

129.(a)

Both A and R are true, and R is the correct explanation of A.

Many clouds contain **supercooled water droplets** that stay liquid well below 0°C because they lack particles on which ice can form. **Silver iodide** has a **hexagonal crystal lattice very similar to ice**, so when it is dispersed into such clouds, ice crystals grow on its particles, draw moisture from the droplets, become heavy and may fall as snow or rain. R therefore directly explains why silver iodide is the preferred agent in A.

Cold clouds can also be seeded with **dry ice** (solid carbon dioxide), while warm clouds are seeded with **hygroscopic salts** such as sodium chloride. Seeding cannot create clouds; it works only when enough moisture is already present. In **late October 2025**, **IIT Kanpur** conducted cloud-seeding trials over parts of Delhi (including Burari and Mayur Vihar) using silver iodide and sodium chloride flares to tackle winter pollution; no measurable rain fell because cloud moisture was only about 15 per cent. The **Indian Institute of Tropical Meteorology, Pune** runs the long-term CAIPEEX cloud research programme.

Hence option (a) is correct.

130.(a)

Statement 1 is not correct: The NCQG was adopted at **COP29 in Baku, Azerbaijan (November 2024)**, often called the "Finance COP". COP28 at Dubai (2023) is remembered for the first **Global Stocktake** and the call to "transition away from fossil fuels".

Statement 2 is correct: Developed countries are to **take the lead** in mobilising **at least USD 300 billion a year by 2035**, from public and private sources, for climate action in developing countries.

Statement 3 is correct: The decision also calls for scaling up total finance from all public and private sources to **at least USD 1.3 trillion a year by 2035**. The **"Baku to Belém Roadmap to 1.3T"** was prepared to show how this could be achieved and was presented ahead of COP30.

The NCQG replaces the earlier goal of **USD 100 billion a year**, first promised at **COP15, Copenhagen (2009)**. **India strongly criticised** the USD 300 billion figure as far too small compared with the needs of developing countries. COP29 also finalised rules for **carbon markets under Article 6** of the Paris Agreement and completed arrangements for the **Fund for responding to Loss and Damage** to begin disbursing money.

Hence option (a) is correct.

131.(a)

A-3 (Ankara): The **36th NATO Summit** was held on **7–8 July 2026 at Ankara, Türkiye**, Turkey's second hosting after Istanbul in 2004. All **32 member states** took part under Secretary General **Mark Rutte**. Albania will host the 2027 summit. NATO was founded by the Washington Treaty (1949), its HQ is in **Brussels**, and **Article 5** provides for collective defence.

B-1 (Yaoundé): The **WTO's 14th Ministerial Conference** was held at **Yaoundé, Cameroon** (26–29 March 2026, running into 30 March) and was chaired by Cameroon's Trade Minister **Luc Magloire Mbarga**

Atangana. It ended **without a Ministerial Declaration**. The **e-commerce customs-duty moratorium (in place since 1998) lapsed** on 31 March 2026 because members could not agree on extending it. Two decisions were adopted: on small economies and on special & differential treatment.

C-4 (Lucknow): Under **India's BRICS chairship (2026)**, **Lucknow** hosted the meeting of **Heads of BRICS National Statistical Offices on 3–4 August 2026**, with over 350 participants and the theme "Quality Statistics as Driver of Change". India showcased its **e-SIGMA** data-collection platform, and MoSPI signed a Letter of Intent with Indonesia's statistics agency.

D-2 (Visakhapatnam): The **Colombo Security Conclave (CSC) Table Top Exercise** was held on 9–11 September 2026 at the **Eastern Naval Command, Visakhapatnam**. It focused on a coordinated response to illicit maritime activities in the Indian Ocean. CSC members are **India, Sri Lanka, Maldives, Mauritius and Bangladesh**, with Seychelles as an observer, and its Secretariat is in Colombo.

Hence option (a).

132.(a)

Statement 1 is correct. On **2 June 2026**, the UNGA elected **Dr. Khalilur Rahman**, Bangladesh's Foreign Minister and a former National Security Adviser and High Representative on the Rohingya issue, as **President of its 81st session**. In a closely fought vote he received **99 votes against 91** for Andreas Kakouris of **Cyprus**. His term began on **8 September 2026**. He succeeds **Annalena Baerbock of Germany**, President of the 80th session. His theme is "Restoring Trust, Managing Transformation: A United Nations that Delivers for All".

Statement 2 is incorrect. The **President of the General Assembly (PGA) is elected by the General Assembly itself**, not the Security Council, for a **one-year term**. The post **rotates among the five regional groups**; the 81st presidency belonged to the **Asia-Pacific Group**.

Hence option (a).

133.(c)

Assertion (A) is true. All **nine Secretaries-General** since 1946 have been men, from Trygve Lie (Norway) to **António Guterres (Portugal)**, whose second term ends on **31 December 2026**. In the 2026 selection race, many Council members have openly favoured choosing the **first woman Secretary-General**. After the **third Security Council straw poll (18 September 2026)**, **Rebeca Grynspan (Costa Rica)** and **Carolyn Rodrigues-Birkett (Guyana)** were the front-runners. Other candidates included Rafael Grossi (Argentina), Michelle Bachelet (Chile) and Macky Sall (Senegal).

Reason (R) is false. The UN Charter has **no provision for regional rotation** of the Secretary-General's post. Rotation, for example the view that 2026 is Latin America's "turn", is only an **informal convention**. Under **Article 97 of the Charter**, the Secretary-General "shall be appointed by the General Assembly upon the recommendation of the Security Council".

Since (A) is true and (R) is false, the answer is option (c).

134.(b)

Statement 1 is correct. On **8 January 2026**, the US announced through a presidential memorandum that it would withdraw from **66 international bodies: 31 UN entities and 35 non-UN organisations**. The **International Solar Alliance** was on the list, along with the **UNFCCC, IPCC, IRENA, IUCN, IPBES, UN Women and UNFPA**. The US had joined the ISA as its **101st member on 10 November 2021** (during COP26, Glasgow).

Statement 2 is correct. The ISA was launched on **30 November 2015 at COP21, Paris**, by PM Narendra Modi and French President François Hollande. Its HQ is at **Gurugram (Haryana)**, and it is the first treaty-based international intergovernmental organisation headquartered in India. Its Framework Agreement came into force in **December 2017**. Its flagship ideas include **"One Sun One World One Grid" (OSOWOG)**. India's Power/New & Renewable Energy Minister has usually presided over the ISA Assembly.

Statement 3 is incorrect. The US **kept its membership of the UN Security Council** (where it is a permanent member with veto power). It also stayed in bodies such as the **World Food Programme and UNHCR**, which it considered to serve essential security or humanitarian purposes.

Hence option (b).

135.(d)

Items 1, 2 and 3 are International Years for 2026:

1. **International Year of Rangelands and Pastoralists (IYRP 2026)** was declared by UNGA resolution **A/RES/76/253**, and the **FAO is the lead agency**. Pastoralists manage at least one-quarter of the world's land and herd about one billion animals. In India, examples of pastoral communities include the **Gaddis, Bakarwals, Van Gujjars, Rabaris and Raikas**.
2. **International Year of the Woman Farmer 2026** was declared by resolution **A/RES/78/279**, again with the **FAO as lead agency**. It aims to close gender gaps in agrifood systems, such as unequal access to land, credit, technology and markets.
3. **International Year of Volunteers for Sustainable Development 2026** was declared by resolution **A/RES/78/127**, with **UN Volunteers (UNV)** as the lead agency.

Item 4 is incorrect. The **International Year of Millets was 2023**, declared by UNGA resolution 75/263 on **India's proposal**. India promotes millets as **"Shree Anna"**.

Hence option (d).

136.(b)

The 2026 (68th batch) Ramon Magsaysay Awardees were announced on **31 August 2026**, the birth anniversary of **Ramon Magsaysay**, the former Philippine President after whom the award is named. **No Indian was among the 2026 awardees.**

Pair 1 is correct. Tommy Koh (Singapore) was recognised for six decades of diplomacy and international law, especially for **leading the negotiations on the UN Convention on the Law of the Sea (UNCLOS)** as President of the Third UN Conference on the Law of the Sea.

Pair 2 is correct. Runa Khan (Bangladesh) was honoured for her NGO **"Friendship"**, which provides floating hospitals, education and disaster relief to climate-vulnerable char and riverine communities.

Pair 3 is incorrect. Bo Kyi is from Myanmar, not Cambodia. He co-founded the **Assistance Association for Political Prisoners (AAPP)**, which documents abuses and supports political prisoners.

Pair 4 is incorrect. Educate Girls is an **Indian** NGO founded by **Safeena Husain** that works to enrol and keep girls in school, especially in Rajasthan. In 2025 it became the **first Indian organisation** to win the Magsaysay Award.

So two pairs are correctly matched: option (b).

The award was established in **1957** by the Rockefeller Brothers Fund trustees and the Philippine government, and is often called **"Asia's Nobel Prize"**. Notable Indian winners include Vinoba Bhave (first Indian, 1958), Mother Teresa, Kiran Bedi, Arvind Kejriwal, Ravish Kumar, and Sandeep Pandey (UP-based social activist, 2002).

137.(a)

Statement 1 is correct. Dr. Huub Lelieveld (Netherlands) was named the **2026 World Food Prize Laureate**. He founded the **Global Harmonization Initiative (2004)** and led a volunteer movement across more than 110 countries to **harmonise food-safety regulations and science**, which helps prevent food-borne illness and reduce food waste. The prize is worth **US$ 500,000**. The 2025 laureate was **Mariangela Hungria** (Brazil), for biological nitrogen fixation.

Statement 2 is incorrect. The World Food Prize was founded in **1986 by Dr. Norman E. Borlaug**, Nobel Peace laureate (1970) and "father of the Green Revolution". It is administered by the **World Food Prize Foundation, Des Moines (Iowa, USA)**. **Dr. M.S. Swaminathan was its first laureate (1987)**, but not its founder.

Hence option (a).

138.(c)

On **10 June 2026**, the Sangeet Natak Akademi announced its Fellowships and Awards for **2024 and 2025**, based on selections made by its General Council (22–26 March 2026, New Delhi). **7 Fellows (Akademi**

Ratna), **108 Akademi Puraskar** awardees and **106 Ustad Bismillah Khan Yuva Puraskar** awardees were selected across music, dance, theatre, traditional, folk and tribal arts, and puppetry. The awards are conferred by the **President of India**.

Statement 1 is correct. The Fellowship (Akademi Ratna) is the Akademi's highest honour and is **limited to 40 living Fellows at any given time**.

Statement 2 is correct. The cash awards are **₹3,00,000 for a Fellow**, **₹1,00,000 for the Akademi Puraskar** and **₹25,000 for the Yuva Puraskar** (for young artists).

Statement 3 is incorrect. The Sangeet Natak Akademi is India's national academy of music, dance and drama. It was set up in **1952** as the first of the three national academies, and it is an **autonomous body under the Ministry of Culture**, registered as a society. Its HQ is at **Rabindra Bhavan, New Delhi**.

Hence option (c).

139.(b)

A-3: "Hara Parbati Katha" (2020), a **Bengali novel** by **Ramkumar Mukhopadhyay**, was selected for the **35th Saraswati Samman (2025)**. The Saraswati Samman was instituted in **1991 by the K.K. Birla Foundation** and carries **₹15 lakh**, making it one of India's most valuable literary awards. It is given for an outstanding work, published in the previous 10 years, in any language in the **Eighth Schedule**. The first recipient was **Harivansh Rai Bachchan** for his autobiography "Dashdwar se Sopan Tak". The K.K. Birla Foundation also gives the **Vyas Samman** (Hindi) and the **Bihari Puraskar** (Rajasthani/Hindi writers of Rajasthan).

B-4: "Angel Down" by Daniel Kraus won the **2026 Pulitzer Prize for Fiction**. It is a First World War novel told in a **single sentence**.

C-2: "We the People: A History of the U.S. Constitution" by Jill Lepore won the **2026 Pulitzer Prize for History**. The Pulitzer Prizes are administered by **Columbia University, New York**.

D-1: "John of John" by Douglas Stuart is on the **Booker Prize 2026 shortlist** (announced in September 2026). Douglas Stuart won the Booker in 2020 for "Shuggie Bain". The 2026 shortlist of six also includes Marlon James (a previous winner), Elizabeth Strout and M. John Harrison. The panel is chaired by classicist **Mary Beard**, and the winner (to be announced on 9 November 2026) receives **£50,000**.

Hence option (b).

140.(d)

Statement 1 is correct. The **30th BWF World Championships** were held on **17–23 August 2026 at the Indira Gandhi Indoor Stadium, New Delhi**. It was only the **second time India hosted** the event; the first was in **Hyderabad in 2009**.

Statement 2 is correct. Alex Lanier (France) beat Kodai Naraoka (Japan) and became the **first Frenchman to win the men's singles world title**. France also won its **first mixed doubles world title** through **Thom Gicquel and Delphine Delrue**. The other champions were **An Se-young (South Korea)** in women's singles, **Liang Wei Keng / Wang Chang (China)** in men's doubles, and **Baek Ha-na / Lee So-hee (South Korea)** in women's doubles.

Statement 3 is correct. Treesa Jolly and Gayatri Gopichand won bronze in women's doubles, ending India's **15-year wait for a women's doubles World Championship medal**. The previous one was Jwala Gutta and Ashwini Ponnappa's bronze in 2011 (London).

Hence option (d).

141.(b)

Pair 1 is incorrectly matched. The Jayakwadi Dam is constructed across the Godavari River in Maharashtra, not the Krishna River. It is a major multipurpose irrigation project serving the Marathwada region.

Pair 2 is correctly matched. The Polavaram Project is constructed across the Godavari River in Andhra Pradesh. It is a major multipurpose project primarily associated with irrigation and water resource management.

Pair 3 is incorrectly matched. The Almatti Dam is constructed across the Krishna River in Karnataka, not the Kaveri. It is an important component of the Upper Krishna Project.

Pair 4 is correctly matched. The Basava Sagar Dam, also known as the Narayanpur Dam, is constructed across the Krishna River in Karnataka and forms part of the Upper Krishna Project.

142.(d)

1. **Godavari River**

   Sabri is an important left-bank tributary of the Godavari. Other major tributaries include Pranhita, Indravati, Manjira, Maner and Purna. Among these, Pranhita is the largest tributary of the Godavari by volume of water contributed.

2. **Krishna River**

   Malprabha is a right-bank tributary of Krishna. Other important tributaries include Bhima, Tungabhadra, Ghataprabha, Koyna, Musi and Dindi. Bhima and Tungabhadra are among the most significant tributaries of the Krishna system.

3. **Pennar River**

   Chitravathi is an important tributary of the Pennar. Other tributaries include Jayamangali, Papagni, Cheyyeru, Kunderu and Sagileru. The Pennar basin extends mainly across Karnataka and Andhra Pradesh.

4. **Tapi River**

   Panjra is a tributary of the Tapi in Maharashtra. Other important tributaries include Vaki, Girna, Bori, Waghur, Aner and Arunavati. The Tapi flows westward and drains into the Arabian Sea, unlike the Godavari, Krishna and Pennar, which are east-flowing peninsular rivers.

143.(d)

Oxygen is the most abundant element in the Earth's crust, constituting about 46.6% by weight. It is mainly present in silicate and oxide minerals and forms a major component of almost all common rocks.

Silicon is the second most abundant element, accounting for about 27.7% of the Earth's crust. It occurs predominantly in the form of silicate minerals, which constitute the bulk of the Earth's crust.

Aluminium is the third most abundant element, making up approximately 8.1% of the crust. It is commonly found in minerals such as feldspars, micas and clay minerals.

Iron constitutes about 5.0% of the Earth's crust. It occurs mainly in minerals such as hematite, magnetite and iron-bearing silicates.

Magnesium accounts for roughly 2.1% of the Earth's crust and is commonly found in minerals such as olivine, pyroxene and dolomite.

144.(b)

Dehradun — Between the Shiwalik and Lesser Himalaya: Correct. Dehradun is a prominent Dun valley located between the Lesser Himalaya (Himachal) to the north and the Shiwalik Range to the south. It is part of the longitudinal valley system characteristic of the outer Himalayas.

Kotli Dun — Between the Greater and Lesser Himalaya: Incorrect. Kotli Dun is a Dun valley associated with the Shiwalik region, and the statement incorrectly places it between the Greater and Lesser Himalayas. The major Dun valleys occur in the zone between the Shiwaliks and the Lesser Himalaya.

Patli Dun — Longitudinal valley of the Shiwalik Himalaya: Correct. Patli Dun is a longitudinal valley associated with the Shiwalik Himalaya, formed in the structural and depositional environment of the Outer Himalayas.

145.(a)

Isohel is an isopleth that connects places receiving an equal amount or duration of sunshine over a specified period. Sunshine duration is an important climatic element because it influences surface heating, evapotranspiration, crop growth and agricultural productivity.

Isocline is a line joining points having an equal slope or inclination. In geographical and topographical analysis, slope information is useful for understanding the nature of terrain, drainage characteristics, erosion potential and suitability of land for different activities.

Isoneph is a line joining places having an equal degree of cloudiness. Cloudiness affects the amount of incoming solar radiation, daytime heating, nocturnal cooling and precipitation processes. Therefore, isonephs are useful in representing the geographical distribution of cloud cover.

Isocheim is a line joining places having the same mean winter temperature. It is particularly useful for representing the spatial distribution of winter thermal conditions and identifying areas with similar winter temperature regimes.

146.(d)

Banni Grassland is located in the Kutch region of Gujarat, so A matches with 4. Khajjiar is a famous meadow in Chamba district of Himachal Pradesh, so B matches with 3. Tal Chhapar Grassland is located in Churu district of Rajasthan, so C matches with 2. Rollapadu Grassland is located in Andhra Pradesh and is known for its habitat of the Great Indian Bustard, so D matches with 1.

Note

Terai Grasslands

Found along the Himalayan foothills, especially in Uttarakhand, Uttar Pradesh and Bihar. They are moist, tall-grass ecosystems associated with Himalayan river sediments.

Dooars Grasslands

Found along the Himalayan foothills of West Bengal and Assam. They consist of tall alluvial grasslands interspersed with forests and wetlands.

Shola Grasslands

Found in the higher elevations of the southern Western Ghats, especially the Nilgiris, Anaimalai and Palani Hills. They occur as a grassland–shola forest mosaic.

Bugyals

Bugyal is the local term for high-altitude alpine meadows of Uttarakhand. Important examples include Bedni, Ali Bedni, Dayara and Gorson Bugyal.

Kashmir Meadows

Gulmarg and Sonamarg are famous meadow landscapes of Jammu and Kashmir, characterized by temperate and alpine vegetation.

Alpine Meadows

Found above the Himalayan tree line, these meadows contain grasses, sedges and flowering herbs and serve as important seasonal grazing grounds

147.(a)

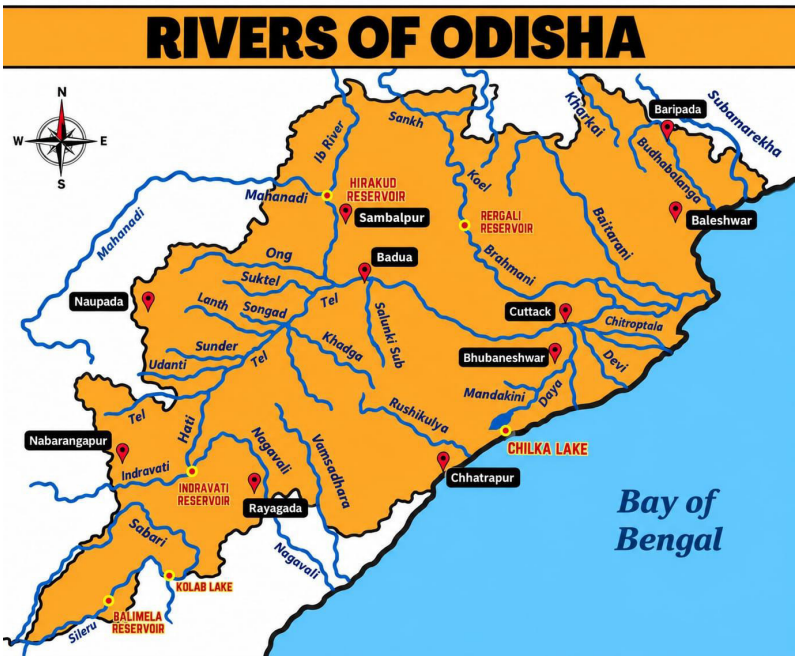
Subarnarekha is the northernmost among the five rivers listed. It flows through Jharkhand and West Bengal before entering Odisha and draining into the Bay of Bengal near the Odisha–West Bengal region. Therefore, it occupies the first position from north to south.

Baitarani flows through northern Odisha and enters the Bay of Bengal through the coastal plain. It lies south of the Subarnarekha drainage and north of the Brahmani–Mahanadi system. Therefore, it occupies the second position.

Brahmani is formed by the confluence of the South Koel and Sankh rivers and flows eastward through Odisha before reaching the Bay of Bengal. It lies south of the Baitarani and north of the Mahanadi. Therefore, it occupies the third position.

Mahanadi is one of the major rivers of Odisha. After flowing through Chhattisgarh and Odisha, it forms a large delta before entering the Bay of Bengal. It lies south of the Brahmani. Therefore, it occupies the fourth position.

Rushikulya flows through southern Odisha and reaches the Bay of Bengal near Ganjam. Among these five rivers, it is the southernmost.



148.(d)

Makalu is located in eastern Nepal, close to the Nepal–Tibet border, at about 87°05′E longitude. Among the four peaks, it is the easternmost.

Cho Oyu lies farther west, on the Nepal–China border, at about 86°40′E longitude. It is therefore west of Makalu but east of Annapurna.

Annapurna is located in central-northern Nepal, around 84°08′E longitude. It lies considerably west of Cho Oyu.

Dhaulagiri is situated farther west in Nepal, around 83°30′E longitude, making it the westernmost among the four.

149.(d)

The Assertion is incorrect because the Moderate leaders did not regard criticism of British rule and communication with the colonial government as mutually incompatible. On the contrary, their political strategy combined criticism of colonial policies with constitutional methods of agitation. They believed that British public opinion and the colonial administration could be persuaded through reasoned argument, petitions, representations and political dialogue.

The Reason is correct because the Moderates openly criticised several aspects of British rule. They raised issues such as high land revenue, excessive military expenditure, economic exploitation, the drain of wealth, discriminatory administrative practices and the inadequate representation of Indians in higher government services. Leaders such as Dadabhai Naoroji used the economic critique of colonial rule to demonstrate how British policies were adversely affecting India.

At the same time, the Moderates continued to communicate their demands to the government through petitions, resolutions, deputations, memorials and legislative councils. They demanded greater Indian participation in administration, expansion of legislative councils, simultaneous examinations for the civil services in India and England, reduction of military expenditure and administrative reforms.

150.(b)

Pair 1 is incorrectly matched. Mudrarakshasa is a Sanskrit political drama attributed to Vishakhadatta. It deals with the political events surrounding the establishment of Chandragupta Maurya's rule after the overthrow of the Nanda dynasty. The central figures include Chandragupta Maurya, Chanakya and Rakshasa. Therefore, it does not narrate the ascent of Samudragupta to power.

Pair 2 is correctly matched. Malavikagnimitram is a Sanskrit drama attributed to Kalidasa. Its principal historical figure is Agnimitra, a ruler of the Shunga dynasty. The drama revolves around Agnimitra's

relationship with Malavika and provides references to the Shunga royal court and contemporary political circumstances.

Pair 3 is incorrectly matched. Milindapanho or Milinda Panha is a Buddhist text presented in the form of a dialogue between Menander (Milinda), the Indo-Greek king, and Nagasena, a Buddhist monk. It discusses various philosophical and Buddhist questions. Nagarjuna was a much later Buddhist philosopher associated with the Madhyamaka school and is not the interlocutor in Milindapanho.

Pair 4 is correctly matched. Dathavamsa is a Sri Lankan Buddhist chronicle dealing primarily with the history and transmission of the Sacred Tooth Relic of the Buddha to Sri Lanka. It is an important source for the religious and historical traditions associated with the Tooth Relic.

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