

1. Which one of the following Carnatic music *ragas* is similar to *Raga Bilawal* in Hindustani music?
- Nat Bhairavi
  - Kamavardhini
  - Hanumatodi
  - Dheera Shankarabharanam

**Answer: D**

Explanation

Raga Bilawal in Hindustani music uses all seven shuddha (natural) notes — S R G M P D N — with no flats or sharps. It is the parent raga of the Bilawal thaat, which contains every scale built on natural notes. Its exact Carnatic equivalent is Dheera Shankarabharanam, the 29th Melakarta of the 72-Melakarta system.

Why the other options fail

- Nat Bhairavi — corresponds to Hindustani Asavari thaat/Bhairavi family, which uses komal (flat) notes; not Bilawal.
- Kamavardhini (also called Pantuvarali, the 51st Melakarta) — corresponds to Hindustani Puriya Dhanashri, using komal Ri, tivra Ma and komal Dha; nowhere near Bilawal.
- Hanumatodi (the 8th Melakarta, known simply as Todi in Carnatic) — its Hindustani analogue is Bhairavi, again loaded with komal swaras.

Sources

[https://www.researchgate.net/publication/395178780\\_A\\_Comparative\\_Study\\_of\\_Carnatic\\_and\\_Hindustani\\_Classical\\_Music\\_Structures\\_Practices\\_and\\_Aesthetics](https://www.researchgate.net/publication/395178780_A_Comparative_Study_of_Carnatic_and_Hindustani_Classical_Music_Structures_Practices_and_Aesthetics)  
<https://www.parrikar.org/hindustani/bilawal/>

2. The artificially fixed rupee-sterling exchange rate prescribed by the Hilton-Young Commission (1926) was adopted by the British Government for which one of the following reasons?
- Aiding the flow of remittances from India and maintaining India's creditworthiness
  - Providing support to Indian importers
  - Encouraging export of cotton produce from India
  - Preventing depreciation of the Rupee in terms of gold

**Answer: A**

**Statement (a) is correct** because the artificially high rupee-sterling exchange rate recommended by the Hilton-Young Commission reduced the number of rupees required to purchase pounds sterling, thereby facilitating the remittance of Britain's "Home Charges" from India and helping maintain India's creditworthiness in London financial markets.

**Statement (b) is incorrect** because although a stronger rupee made imports cheaper, the policy was not designed to support Indian importers. Its primary objective was to serve British fiscal and financial interests rather than the interests of Indian trade.

**Statement (c) is incorrect** because an artificially strong rupee made Indian exports relatively more expensive in foreign markets. Far from encouraging exports, it adversely affected Indian export commodities such as cotton, jute and tea, which became less competitive internationally.

**Statement (d) is incorrect** because the issue before the Hilton-Young Commission concerned the rupee's parity with sterling rather than preventing depreciation in terms of gold. The prescribed exchange ratio was intended to maintain a particular sterling value of the rupee and not primarily to preserve gold parity.

**Therefore, the correct answer is (a) Aiding the flow of remittances from India and maintaining India's creditworthiness.**

Sources

[https://www.rbi.org.in/history/Brief\\_HiltonYoung.html](https://www.rbi.org.in/history/Brief_HiltonYoung.html)  
<https://journals.sagepub.com/doi/10.1177/025764308900500104>  
<https://archive.org/details/dli.ministry.21473>  
[https://www.business-standard.com/article/opinion/rupee-at-80-the-indian-tradition-of-political-involvement-in-exchange-rate-122072000144\\_1.html](https://www.business-standard.com/article/opinion/rupee-at-80-the-indian-tradition-of-political-involvement-in-exchange-rate-122072000144_1.html)

3. Consider the following statements:

- I. Pali texts contain the first definite references to coins, e.g., *kahapana*, *nikkha*, *kamsa*, and *kakanika*.
- II. The literary evidence from Pali texts is corroborated by archaeological evidence of punch-marked coins from many sites, most of them made of silver.

The above statements have been associated with which of the following?

1. Emergence of urban life
2. Transition to money economy

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer - C**

**Explanation**

**Statement I is correct** because the references to coins such as *kahapana*, *nikkha*, *kamsa* and *kakanika* in the Pali texts are closely associated with the rise of towns, trade, merchant groups and commercial activity during the period of the Second Urbanisation (c. 6th century BCE). The growth of urban centres such as Rajagriha, Pataliputra, Kashi and Ujjayini required a more sophisticated medium of exchange than barter and therefore forms an important indicator of the emergence of urban life.

**Statement II is also correct** because the repeated references to coinage in the Pali texts are corroborated by the archaeological discovery of silver punch-marked coins from numerous sites across northern India. This literary and archaeological evidence points to the increasing use of metallic currency in economic transactions and marks the transition from a predominantly barter-based economy to a money economy.

**Therefore, the evidence cited in the statements is associated with both the emergence of urban life and the transition to a money economy. Hence, the correct answer is (c) Both 1 and 2.**

Sources

[https://books.google.com/books/about/A\\_History\\_of\\_Ancient\\_and\\_Early\\_Medieval.html?id=Pq2iCwAAQBAJ](https://books.google.com/books/about/A_History_of_Ancient_and_Early_Medieval.html?id=Pq2iCwAAQBAJ)

<https://ncert.nic.in/textbook/pdf/lehs102.pdf>

<https://www.wisdomlib.org/history/essay/bihar-and-eastern-uttar-pradesh/d/doc1210790.html>

4. Which of the following temples has/have a Nagara-style shikhara?

1. Malegitti Shivalaya, Badami
2. Huchimalligudi Temple, Aihole
3. Dashavatara Temple, Deogarh
4. Virupaksha Temple, Pattadakal

Select the answer using the code given below:

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

**Answer - B**

**Explanation**

**Statement 1 is incorrect** because Malegitti Shivalaya at Badami is not classified as having a Nagara-style shikhara.

**Statement 2 is correct** because Huchimalligudi Temple at Aihole belongs to the Early Chalukyan experimental phase and is hence regarded as a standard example of a Nagara-style shikhara in this classification.

**Statement 3 is correct** because the Dashavatara Temple at Deogarh is one of the earliest and most celebrated examples of the Nagara style, characterized by its curvilinear shikhara.

**Statement 4 is incorrect** because the Virupaksha Temple at Pattadakal is a Dravida-style temple with a pyramidal vimana.

## Sources

<https://ncert.nic.in/textbook/pdf/kefa106.pdf>  
<https://whc.unesco.org/en/tentativelists/5972/>  
<https://asi.nic.in/world-heritage-sites-pattadakal-monuments-virupaksha-temple/>  
<https://cec.nic.in/webpath/curriculum/Module/FART/Paper27/3/downloads/script.pdf>  
<https://mapacademy.io/article/dashavatara-temple-deogarh/>

5. Among the four main forms of existence of life recognized in Jainism, which one of the following is not included?

- (a) *Deva* (gods)
- (b) *Yaksha* (demi-gods)
- (c) *Manushya* (humans)
- (d) *Tiryancha* (animals and plants)

**Answer: B**

**Explanation**

**Option (a) Deva is incorrect** because *Deva-gati* (celestial beings) is one of the four principal states of existence (*gatis*) recognised in Jain cosmology.

**Option (c) Manushya is incorrect** because *Manushya-gati* (human beings) is one of the four principal *gatis* and is regarded as the most favourable state for attaining liberation (*moksha*).

**Option (d) Tiryancha is incorrect** because *Tiryanch-gati* includes animals, birds, plants, insects and all other non-human living beings, and constitutes one of the four recognised *gatis*.

**Option (b) Yaksha is correct** because *Yakshas* do not constitute a separate state of existence in Jain cosmology. They are classified as a sub-category of celestial beings (*Deva-gati*), specifically among the *Vyantara* deities. Therefore, Yaksha is not one of the four principal forms of existence recognised in Jainism.

**Hence, the correct answer is (b) Yaksha.**

## Source

[https://www.en.encyclopediaofjainism.com/index.php/16.\\_Kinds\\_of\\_Destiny\\_\(Gati\)](https://www.en.encyclopediaofjainism.com/index.php/16._Kinds_of_Destiny_(Gati))  
<https://jainworld.com/library/jain-books/books-on-line/jainworld-books-in-indian-languages/antiquity-of-jainism/tattvas-of-jainism/>  
<https://jainworld.com/languages/jw-in-world-languages/serbia/self-learning-lessons-for-juniors/gati/>

6. The *Hallisalaysa* painting in the Bagh Caves represents:

- (a) A joyous folk dance
- (b) Buddha in a meditative pose
- (c) The depiction of Shiva and Parvati on Kailasha
- (d) Samudramanathan (Churning of the Ocean)

**Answer - A**

**Explanation**

**Option (a) A joyous folk dance is correct** because the *Hallisa Lasya* / *Hallisalasya* painting in the Bagh Caves represents a circular dance scene with dancers and musicians in rhythmic movement. It reflects a lively secular/folk performance rather than a purely religious Buddhist narrative.

**Option (b) Buddha in a meditative pose is incorrect** because although the Bagh Caves contain Buddhist themes and figures, the *Hallisa Lasya* panel specifically depicts a dance scene and not the Buddha in meditation.

**Option (c) Shiva and Parvati on Kailasha is incorrect** because the Bagh Caves are Buddhist rock-cut viharas, and the *Hallisa Lasya* mural is not a Shaivite mythological scene.

**Option (d) Samudramanathan is incorrect** because the Churning of the Ocean is a Hindu mythological theme found in other sculptural traditions, not in the *Hallisa Lasya* painting of the Bagh Caves.

**Therefore, the correct answer is (a) A joyous folk dance.**

## Sources

<https://dhar.nic.in/en/tourist-place/bagh-caves/>  
<https://asi.nic.in/bagh-caves/>

<https://www.livehistoryindia.com/story/monuments/bagh-caves>

7. Consider the following statements relating to the use of the place-value system in India:

1. The earliest epigraphic use of the place-value system in India is found in the Mankani plates from Gujarat (AD 595–596).
2. In the ninth century, place-values become general in inscriptions all over India.
3. The place-values have been found in Sanskrit inscriptions in South-east Asia as early as the seventh century.

Which of the statements given above are correct?

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

**Answer: D**

**Explanation**

**Statement 1 is correct** because the **Mankani Plates of Taralavamin (CE 595–596)** are regarded as the earliest epigraphic evidence from India showing the use of the decimal place-value system.

Although some scholars have debated the reading due to the fragmentary condition of the inscription, it is widely cited as the earliest known Indian epigraphic example of place-value notation.

**Statement 2 is correct** because by the **9th century CE** the place-value system had become widely used in Indian inscriptions. The famous **Gwalior inscription (876 CE)** provides indisputable evidence of the use of decimal notation and the zero symbol, while numerous contemporary inscriptions of the Rashtrakutas, Palas, Pratiharas and Cholas also employed place-value numerals.

**Statement 3 is correct** because Sanskrit and Sanskrit-influenced inscriptions in **Southeast Asia** were already using the decimal place-value system by the **7th century CE**. Inscriptions from Cambodia, Sumatra and Java contain place-value numerals and even early representations of zero, demonstrating the transmission of Indian mathematical knowledge along with scripts, calendars and cultural influences.

**Therefore, all three statements are correct and the correct answer is (d) 1, 2 and 3.**

**Sources**

<http://www.sahapedia.org/realm-written-words-indian-epigraphic-records-c-third-century-bce-thirteenth-century-ce>

<https://www.wisdomlib.org/history/essay/impact-of-vedic-culture-on-society/d/doc1121343.html>

<https://angkordatabase.asia/books/indian-epigraphy>

<https://ijarsct.co.in/Paper5166.pdf>

8. Consider the following statements about the archaeological findings in Harappan towns:

- I. There is wide occurrence of spindle-whorls in the houses but absence of spinning wheels.
- II. Weights and measurement scales, complete with graduations have been discovered.
- III. There are houses built in large part with baked bricks, around relatively spacious courtyards, with their own wells, bathing platforms, and large rooms.

Which of the following inferences can be drawn from the above statements?

1. Statement I suggests that spinning was a laborious activity done at home.
2. Statement II suggests the extent of the scientific knowledge that the Harappans possessed.
3. Statement III suggests the emergence of a common property system.

Select the answer using the code given below:

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

**Answer: A**

**Explanation**

**Statement 1 is correct** because the widespread discovery of **spindle-whorls** in Harappan houses indicates that spinning was a common domestic activity. At the same time, the absence of spinning wheels suggests that yarn was spun manually, making it a labour-intensive household craft. Therefore, the inference that spinning was a laborious activity carried out at home is valid.

**Statement 2 is correct** because archaeologists have discovered **standardised weights and measuring scales with graduations** across Harappan sites. Such precision and uniformity reflect a sophisticated understanding of measurement, standardisation and practical scientific knowledge. Therefore, the inference regarding the extent of Harappan scientific knowledge is justified.

**Statement 3 is incorrect** because the presence of well-built houses with courtyards, private wells, bathing platforms and large rooms indicates a high level of urban planning and domestic comfort, but it does **not establish the existence of a common property system**. On the contrary, the evidence points towards individual or family ownership and use of residential spaces.

**Therefore, only Statements 1 and 2 can be validly inferred and the correct answer is (a) 1 and 2 only.**

Sources

<https://ncert.nic.in/textbook/pdf/lehs101.pdf>

<https://asi.nic.in/world-heritage-sites-archaeological-site-of-dholavira-a-harappan-city/>

[https://books.google.com/books/about/A\\_History\\_of\\_Ancient\\_and\\_Early\\_Medieval.html?id=Pq2iCwAAQBAJ](https://books.google.com/books/about/A_History_of_Ancient_and_Early_Medieval.html?id=Pq2iCwAAQBAJ)

<https://www.ijcrt.org/papers/IJCRT1893341.pdf>

9. Which one of the following statements about the Eka Movement and Bardoli Satyagraha is correct?

- (a) The Eka Movement was throughout supported and organized by the Congress while Bardoli Satyagraha was initially independent of Congress influence and was only in the last stages supported by the Congress.
- (b) The Eka Movement was provided leadership by the *taluqdars* of Awadh, whereas the Bardoli Satyagraha was a movement of the landless labourers.
- (c) The Bardoli Satyagraha was a campaign against the enhancement of land revenue, while the Eka Movement was a protest against excessive extraction of rents.
- (d) The Eka Movement was located in the Varanasi and Mirzapur districts of the present-day U.P., while the Bardoli Satyagraha took place in Saurashtra.

**Answer - C**

**Explanation**

**Option (a) is incorrect** because the **Eka Movement** was not throughout organized and supported by the Congress. It initially received some support from local Congress and Khilafat leaders, but soon developed independently under peasant leadership. Conversely, the **Bardoli Satyagraha** was organized under the leadership of Vallabhbhai Patel and was closely associated with the Congress from the beginning.

**Option (b) is incorrect** because the **Eka Movement** was primarily a peasant movement against high rents, illegal cesses and oppressive landlord practices; it was not led by the *taluqdars* of Awadh. Similarly, the **Bardoli Satyagraha** was a movement of peasant landholders against enhanced land revenue and not a movement of landless labourers.

**Option (c) is correct** because the **Bardoli Satyagraha (1928)** was launched in protest against the sharp enhancement of **land revenue** by the Bombay Presidency government. The **Eka Movement (1921–22)**, on the other hand, was directed against excessive **rent demands**, illegal dues and exploitation by landlords and revenue contractors.

**Option (d) is incorrect** because the **Eka Movement** was centred mainly in the districts of Hardoi, Bahraich, Sitapur and neighbouring areas of Awadh rather than Varanasi and Mirzapur. Although the Bardoli Satyagraha took place in Bardoli taluka of Gujarat, Bardoli is not located in Saurashtra.

**Therefore, the correct answer is (c) The Bardoli Satyagraha was a campaign against the enhancement of land revenue, while the Eka Movement was a protest against excessive extraction of rents.**

Sources

<https://www.macmillan.com/india/title/2018/9789386215093/>

<https://thefederal.com/category/features/how-bardoli-satyagraha-helped-vallabhbhai-patel-earn-the-title-sardar-127134>

<https://thebetterindia.com/243823/farmer-protests-tax-law-rollback-bardoli-satyagraha-sardar-patel-freedom-struggle-gujarat-india-history-nor41/>

<https://www.penguin.co.in/book/indias-struggle-for-independence/>

10. Consider the following statements about the Rigvedic period:

I. Irrigation from wells allowed agriculture to expand away from flood plains and strips on river margins into the present Punjab and Haryana plains having underground water levels reasonably close to the surface.

II. Draught-animal power was employed to draw up water out of the wells.

Which of the following information support/supports the above statements?

1. There is evidence in the *Rigveda* of the use of *ashma chakra* (stone pulley wheel) and *ahava* (strapped wooden pails) to draw up water.
2. Mention has been made in the *Rigveda* of the use of implements like *parashu/kulisha* (axe) and *datra/sreni* (sickle).
3. There is a history of the use of ox, even before the *Rigveda*, for ploughing the land and pulling the carts.

Select the answer using the code given below:

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

**Answer: C**

**Explanation**

**Statement 1 supports the given statements** because the *Rigveda* contains references to **ashma chakra** (stone pulley wheel) and **ahava** (wooden buckets or pails) used for drawing water from wells. This provides direct evidence of well irrigation and supports the inference that agriculture could expand beyond river flood plains into areas where groundwater was accessible.

**Statement 2 does not support the given statements** because the mention of agricultural implements such as **parashu/kulisha** (axe) and **datra/sreni** (sickle) indicates the existence of settled agricultural activity and land clearance. Such tools would have facilitated the expansion of cultivation into new areas beyond the immediate river margins. However these statements do not tell us about any significant agricultural irrigation advancement.

**Statement 3 further supports the given statements** because oxen were already being used for ploughing fields and pulling carts before and during the Rigvedic period. The existence of draught-animal power makes it reasonable to infer the use of animal strength in agricultural operations, including drawing water from wells.

**Therefore, all three statements support the given assertions regarding agricultural expansion and the use of draught-animal power in the Rigvedic period. Hence, the correct answer is (b) 1, 2 and 3.**

Sources

<https://hess.copernicus.org/articles/24/4691/2020/>

<https://vedicheritage.gov.in/agriculture/>

<https://www.kiran.nic.in/Agri-Heritage.html>

<https://india.oup.com/product/indias-ancient-past-9789354977527/>

11. Consider the following assertion:

*In the Pleistocene period either the Yamuna once flowed into the Indus, or the Sutlej flowed into the Yamuna and one major tributary of either had shifted from the Ganga to the Indus or vice versa.*

Which of the following is/are the basis of the above assertion?

1. The *Nadi-Sukta* of the *Rigveda*
2. The explorations of the Sutlej and the Yamuna by Robert Bruce Foote
3. The presence of the same species of dolphins in both the Indus and the Ganga river systems

Select the answer using the code given below:

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

**Answer - D (doubtful)**

**Explanation**

- **Statement 1 is Incorrect:** The *Nadi-Sukta* (Hymn of Rivers) is found in the 10th Mandala of the Rigveda. While it provides an invaluable historic snapshot of the geography of Northwest India during the Vedic period (naming rivers from the Ganga in the east to the Indus and its western tributaries), it describes them as completely distinct, contemporary geographical entities. It does not provide a scientific basis for prehistoric Pleistocene shifts that occurred hundreds of thousands of years prior.
- **Statement 2 is Incorrect:** Robert Bruce Foote is globally celebrated as the "*Father of Indian Prehistory*" due to his discovery of Paleolithic stone tools (such as the famous Pallavaram handaxe near Chennai). His pioneering work focused on prehistoric human tool cultures, stratigraphy, and archaeology, rather than the geomorphological modeling of the Sutlej-Yamuna river capture.
- **Why Statement 3 is the Correct Basis:** Freshwater river dolphins belonging to the genus *Platanista* are **obligate aquatic mammals**. They are completely blind, survive only in freshwater, and cannot travel across land or migrate through the salty waters of the open ocean. The presence of the **same species of freshwater dolphin (*Platanista gangetica*) in both the Indus river system and the Ganga-Brahmaputra river system** is considered definitive biological proof by geologists and evolutionary biologists that a physical connection existed between the two basins during the late Cenozoic/Pleistocene period. This allowed a single ancestral dolphin population to colonize both systems before a topographical uplift (such as the rising of the Delhi-Ambala-Ridge) permanently fractured the connection and isolated them into two sub-species (the Indus river dolphin and the Gangetic river dolphin).
- **Statement 3 is the only correct statement because the biological presence of identical freshwater dolphin species across isolated basins serves as the definitive geological proof of an ancient physical link between the Indus and Ganga river systems.**

Sources

[https://en.wikisource.org/wiki/The\\_Hymns\\_of\\_the\\_Rigveda/Book\\_10/Hymn\\_75](https://en.wikisource.org/wiki/The_Hymns_of_the_Rigveda/Book_10/Hymn_75)

<https://pubs.geoscienceworld.org/gsa/geology/article-abstract/40/3/211/130723/U-Pb-zircon-dating-evidence-for-a-Pleistocene>

<https://media.eol.org/pages/1240173/articles>

**12. What does an empty seat represent in early Buddhist iconography?**

- (a) The meditation of the Buddha
- (b) The Buddha's First Sermon
- (c) The Buddha's *Mahaparinibbana*
- (d) The Buddha's *Mahabhinishkramana*

**Answer: (a) The meditation of the Buddha.**

In early Buddhist art (from the Maurya, Shunga, and early Satavahana periods, roughly up to the 1st century CE), the Buddha was never represented in human form. This phase of art is known as the **aniconic phase**. Instead of depicting his physical body, artists used symbols to represent major life events, spiritual states, or concepts associated with him.

- **Why an empty seat represents meditation:** An empty seat, throne, or stone pediment placed beneath the sacred Bodhi tree specifically symbolizes the **enlightenment and supreme meditation (*Dhyana*) of the Buddha**. It represents the exact spot (*Vajrasana*) where Siddhartha Gautama sat in deep meditation to conquer the illusions of Mara and achieve ultimate awakening. The seat is left intentionally vacant to emphasize his transcendence beyond physical form.

**Symbolism of Other Major Events:**

To understand early Buddhist iconography completely, it is helpful to look at how the other life events listed in the options were typically represented:

- **The Buddha's First Sermon (b):** Represented by the **Dharmachakra** (the Wheel of the Law), often resting on a pedestal or pillar, symbolizing the turning of the wheel of truth at Sarnath.
- **The Buddha's Mahaparinibbana (c):** Represented by a **Stupa**, which symbolizes his final liberation and passing away from the cycle of rebirth.
- **The Buddha's Mahabhinishkramana (d):** The "Great Renunciation" (leaving his palace) is uniquely represented by a **riderless horse** (his horse, Kanthaka), often with its hooves held up by celestial beings to avoid making noise.
- **Option (a) is the correct answer because an empty seat in aniconic Buddhist art specifically signifies the physical absence of the enlightened master while focusing entirely on his profound state of meditation.**

Sources

<https://ncert.nic.in/textbook/pdf/keh103.pdf>

[https://ccrtindia.gov.in/art\\_education.php](https://ccrtindia.gov.in/art_education.php)

<https://ccrtindia.gov.in/buddhist-art.php>

**13. Which of the following pairs of ancient and modern names of rivers is/are correctly matched?**

1.	Vitasta	Chenab
2.	Asikni	Jhelum
3.	Parushni	Ravi
4.	Yavyavati	Beas

Select the answer using the code given below:

- 1 and 2
- 3 and 4
- 3 only
- 4 only

**Answer: (c) 3 only.**

**Options & Statements Breakdown**

**Pair 1 (Vitasta : Chenab) is Incorrect:** **Vitasta** is the ancient Rigvedic name for the **Jhelum** river, whereas the Chenab was known as **Asikni**.

**Pair 2 (Asikni : Jhelum) is Incorrect:** **Asikni** is the ancient Rigvedic name for the **Chenab** river, whereas the Jhelum was known as **Vitasta**.

**Pair 3 (Parushni : Ravi) is Correct:** **Parushni** is the exact ancient Rigvedic name for the **Ravi** river, famous for the *Battle of the Ten Kings (Dasharajna Yuddha)*.

**Pair 4 (Yavyavati : Beas) is Incorrect:** The ancient Rigvedic name for the **Beas** river is **Vipas** (or *Vipasha*), while *Yavyavati* refers to a different river system (often identified with the modern Zhob river).

**Pair 3 is the only correctly matched option because Parushni corresponds to the Ravi river, while the ancient names for the Jhelum and Chenab were transposed.**

Sources

<https://vedicheritage.gov.in/rigveda-samhita/>

<https://vedicheritage.gov.in/rigveda/>

<https://archive.org/details/historyofancientearlymedievalindiaupindersingh>

<https://www.studyiq.com/articles/vedic-age/>

**14. Which of the following statements on the Amaravati Stupa and its relief sculpture is/are correct?**

1. It was located in the lower Krishna valley.
2. In India, it was next only to the Sanchi Stupa in size.
3. The Amaravati school of sculpture made a lasting impact on the later South Indian sculpture, and its products were carried to Sri Lanka and South-east Asia.

Select the answer using the code given below:

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

**Answer is (b) 1 and 3 only.**

**Statement 1 is Correct:** The Amaravati Stupa (historically called the *Mahachaitya*) is located at Amaravathi village in the Guntur district of Andhra Pradesh, lying directly within the geographically vital **lower Krishna River valley**. The region was a prominent hub under the Satavahana dynasty and later the Ikshvaku rulers.

**Statement 2 is Incorrect:** Historically, the Amaravati Stupa was actually **larger than the Sanchi Stupa**. At its peak, the diameter of the Amaravati Stupa base was about 168 feet with a height of nearly 90-100 feet, making it the largest *Mahachaitya* in the entire Deccan region, superseding Sanchi in absolute dimensional scale and decorative expanse.

**Statement 3 is Correct:** The **Amaravati school of sculpture** (characterized by its dynamic figures, deep carving, use of white marble/limestone slabs, and intricate narrative structures) deeply influenced Pallava, Chola, and Chalukyan traditions. Due to thriving maritime trade routes, artistic items, motifs, and architectural styles from Amaravati crossed the ocean and made a profound, lasting impact on early Buddhist art in **Sri Lanka (such as at Anuradhapura) and South-east Asia**.

**Statements 1 and 3 are completely correct because the Amaravati Stupa flourished within the lower Krishna valley and its art traveled internationally, though it was structurally larger than Sanchi, rendering Statement 2 false.**

Sources

<https://ncert.nic.in/textbook/pdf/kehc104.pdf>

<https://archive.org/details/historyofancientearlymedievalindiaupindersingh>

<https://www.studyiq.com/articles/buddhist-architecture-and-sculpture/>

**15.** Which of the following pairs of the king and his dynasty in early historical Tamilakam is/are **not** correctly matched?

1.	Senguttuvan	Chera
2.	Udiyanjeral	Chola
3.	Nedunjeliam	Pandya

Select the answer using the code given below:

- (a) 1 and 2  
 (b) 2 only  
 (c) 1 and 3

**Answer: (b) 2 only.**

**Statement 1 is Correctly Matched: Senguttuvan** (also known as Chera Senguttuvan or the Red Chera) is the most celebrated ruler of the **Chera** dynasty in Sangam literature. He is famously immortalized in the epic *Silappatikaram* for building a temple dedicated to Kannagi (the Pattini cult).

**Statement 2 is Incorrectly Matched: Udiyanjeral** (Udiyan Cheralathan) was actually the earliest known historical king of the **Chera** dynasty, not the Chola dynasty. He is famous in Sangam poems for reportedly feeding both the opposing armies during the Kurukshetra War.

**Statement 3 is Correctly Matched: Nedunjeliam** (specifically Thalaiyalanganathu Seruvendra Nedunjeliam) is the most illustrious king of the early **Pandya** dynasty. He is celebrated for defeating a combined coalition of the Cheras, Cholas, and five velir (minor chieftains) at the famous Battle of Thalaiyalanganam.

**Statement 2 is the only incorrectly matched pair because Udiyanjeral was a foundational king of the Chera dynasty rather than the Cholas, making option (b) the correct choice.**

Sources

<https://archive.org/details/historyofsouthin00sast>

<https://archive.org/details/historyofancientearlymedievalindiaupindersingh>

<https://www.tamilvu.org/library/14100/html/14100ind.htm> (Pathitrupathu / Padirrupattu)

<https://archive.org/details/in.ernet.dli.2015.188721> (Silappatikaram)

<https://www.studyiq.com/articles/sangam-age>

**16** Which of the following factors contributed to the formation of the Forward Bloc by Subhas Chandra Bose in 1939?

1. Bose failed to win the confidence of Mahatma Gandhi.
2. The Congress Left was disunited and failed to support Bose.
3. The Communists did not support Bose in his endeavours.
4. The supporters of M.N. Roy and socialist leaders like Jayaprakash Narayan preferred Congress unity to supporting Bose.

Select the answer using the code given below:

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

**Answer: B**

Explanation

**Statement 1 is Correct:** At the **Tripuri Session of 1939**, Subhas Chandra Bose successfully ran for re-election and defeated Pattabhi Sitaramayya, the candidate explicitly backed by Mahatma Gandhi. Gandhi declared Sitaramayya's defeat as "more mine than his." Consequently, Bose failed to win the political trust and confidence of Gandhi and the old right-wing guard, leading to a deep ideological deadlock within the Congress Working Committee.

**Statement 2 is Correct:** Although Bose counted on the collective weight of the Left factions within Congress to push for a radical ultimatum against the British, the **Congress Left proved heavily fragmented and disorganized**. At the crucial moment, they failed to solidify behind Bose or help him form an alternative Left-led functioning executive.

**Statement 3 is Incorrect:** While the regular Socialists fractured, the **Communists (organized under the National Front) actually initially aligned with and supported Bose** in his attempts to construct the Left Consolidation Committee. They did not pull back or isolate him during the internal political fallout until much later when international geopolitical dynamics altered during World War II.

**Statement 4 is Correct:** Key ideological stalwarts of the Left—specifically the Radical Democrats led by **M.N. Roy** and top leaders of the Congress Socialist Party (CSP) like **Jayaprakash Narayan**—ultimately refused to back Bose to the point of fracturing the party. Fearing a catastrophic split in the anti-imperialist movement, they actively **preferred maintaining broader Congress unity under Gandhi's leadership** rather than backing Bose's splinter actions.

**Statements 1, 2, and 4 are correct because the primary catalyst for the creation of the Forward Bloc was the combination of Mahatma Gandhi's lack of confidence in Bose and the subsequent failure of key Left leaders like M.N. Roy and Jayaprakash Narayan to break Congress unity in his support.**

**Sources**

[https://en.banglapedia.org/index.php/Forward\\_Bloc](https://en.banglapedia.org/index.php/Forward_Bloc)

<https://www.marxists.org/history/etol/newspape/win/vol02/no08/roy.htm>

<https://archive.org/details/indiasstrugglefo00bipa/page/320/mode/2up>

**17.** Consider the following statements regarding the British policy in Awadh immediately after its annexation in 1856:

1. The *taluqdars* were dispossessed of their estates but allowed to retain their arms and forts.
2. A Summary Revenue Settlement was made in 1856 assuming that the *taluqdars* were outsiders.
3. The British believed in taking revenue directly from the peasants by removing the *taluqdars*.

Which of the statements given above is/are correct?

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

**Answer: (a) 2 and 3 only**

**Explanation.**

**Statement 1 is correct:** Immediately following the annexation of Awadh in 1856, the British moved swiftly to dismantle the traditional military power bases of the local landed aristocracy. To neutralize any potential armed resistance, the *taluqdars* (landlords) were systematically **disarmed, their armed retainers were disbanded, and their mud forts were completely destroyed**. They were strictly forbidden from retaining weaponry or maintaining fortified strongholds.

**Statement 2 is Correct:** The first land revenue system introduced by the British in the province was the **Summary Settlement of 1856**. This policy operated under the ideological assumption that the *taluqdars* were **interlopers and outsiders** with no permanent, organic stakes in the land. The British administration asserted that the *taluqdars* had acquired their extensive estates purely through historical force, coercion, and fraud under the Nawab's weakening regime.

**Statement 3 is Correct:** Guided by utilitarian economic theories, British land revenue officials believed that by bypassing and removing the middleman (*taluqdars*), the state could establish **direct revenue settlements with the actual cultivators/peasants** (the primary owners of the soil). They presumed this structural shift would simultaneously eliminate feudal exploitation of the peasantry and maximize direct tax returns for the East India Company's treasury.

**Statements 2 and 3 are correct because the Summary Settlement of 1856 was designed to collect revenue directly from the peasantry by removing *taluqdars*, who were treated as interlopers and completely stripped of both their estates and their forts.**

**Sources**

<https://rrb.iitk.ac.in/sathee-railway-exams/student-corner/ncert-books/class-12/themes-in-indian-history/chapter-10-rebels-and-the-raj-the-revolt-of-1857-and-its-representations/>

<https://www.currentaffairsindia.info/2011/11/awadh-in-revolt-of-1857-summary.html>

**18.** Consider the following assertion:

*The genesis of political alliances based on community lay in the very nature of the Montague-Chelmsford Reforms, 1919.*

Which of the following statements support/supports the above assertion?

1. Reforms retained and extended the principle of separate electorates.
2. Separate electorates were supposed to counter Indian nationalism, which was growing stronger.
3. Deprived classes rallied around the favours inherent in separate electorates.

Select the answer using the code given below:

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

**Answer (d) 1,2 and 3**

**Explanation**

**Statement 1 is correct.**

The Montagu–Chelmsford Reforms retained and expanded the system of separate electorates to several communities such as Sikhs, Anglo-Indians, Europeans, and Indian Christians. This promoted politics based on communal identities and encouraged community-based political alliances.

**Statement 2 is correct.**

Separate electorates were introduced and expanded by the British as part of their “divide and rule” policy. Their aim was to weaken the growing nationalist movement led by the Indian National Congress by dividing Indians along communal lines.

**Statement 3 is correct.**

Many minority and deprived groups supported separate electorates because they provided political representation and safeguards for their interests. This led such groups to organize politically around community identities.

**Therefore, all three statements are correct.**

**Sources**

<https://www.legislative.gov.in/constitution-of-india-1919/>

<https://egyankosh.ac.in/bitstream/123456789/22367/1/Unit-28.pdf>  
<https://archive.org/details/indiasstrugglefo00bipa/page/232/mode/2up>

19. Pandit Mallikarjun Mansur, the famous classical singer from Karnataka, represented the:

- (a) Agra Gharana
- (b) Gwalior Gharana
- (c) Patiala Gharana
- (d) Jaipur-Atrauli Gharana

**Answer: (d) Jaipur-Atrauli Gharana.**

**Option (a) is Incorrect:** The **Agra Gharana** is deeply rooted in the *Dhrupad-Dhamar* tradition). Its most legendary exponents include Ustad Faiyaz Khan, Khadim Hussain Khan, and Zohrabai Agrewali—not Pandit Mallikarjun Mansur.

**Option (b) is Incorrect:** The **Gwalior Gharana** is regarded as the oldest and the foundational *Khayal* gharana of Hindustani classical music, characterized by its simplicity and use of straight-note combinations (*Sapaat Taans*).

**Option (c) is Incorrect:** The **Patiala Gharana** is famous for its intricate, lightning-fast vocal modulations (*taans*) and highly expressive rendering of *Thumris*. It was founded by Ustad Ali Baksh Khan and Ustad Fateh Ali Khan, and famously popularized by Ustad Bade Ghulam Ali Khan.

**Option (d) is Correct:** **Pandit Mallikarjun Mansur** was an undisputed titan of the **Jaipur-Atrauli Gharana** (founded by Ustad Alladiya Khan). This gharana is highly unique for its rendering of rare or complex ragas (*jod ragas* and *achhop ragas*) and its continuous, seamless flow of structured melodic phrases (*taans*) that bridge beats without breaks

Sources:

[https://www.sangeetnatak.gov.in/public/uploads/awardees/docs/1704545893\\_Rajshekhhar%20Mansur.pdf](https://www.sangeetnatak.gov.in/public/uploads/awardees/docs/1704545893_Rajshekhhar%20Mansur.pdf)

<https://baithak.org/mallikarjun-mansur/>

20. In which one among the following texts does the term *kshetra-patni* ('mistress of the field') originate?

- (a) *Rigveda*
- (b) *Atharvaveda*
- (c) *Ashtadhyayi*
- (d) *Arthashastra*

**The correct answer is (b) Atharvaveda.**

**Options & Statements Breakdown**

**Option (a) is Incorrect:** While the **Rigveda** contains the masculine counterpart **Kshetra-pati** (*Lord of the Field*) in its 4th Mandala, where he is invoked as a deity presiding over agriculture, soil fertility, and cattle welfare, the specific feminine form *kshetra-patni* does not originate here.

**Option (b) is Correct:** The precise term **kshetra-patni** (*mistress of the field* or *goddess of the field*) makes its earliest structural appearance in the **Atharvaveda** (specifically in Book 2, Hymn 8). In this text, she is invoked alongside her masculine counterpart to grant protection to agricultural lands, drive away plant diseases, and bless the soil with bountiful harvests.

**Option (c) is Incorrect:** Panini's **Ashtadhyayi** is a monumental treatise on Sanskrit grammar dating to around the 4th century BCE. While it provides rules for deriving words related to fields (*kshetra*) and ownership, it is a linguistic text rather than the original source hymn for this Vedic agrarian deity.

**Option (d) is Incorrect:** Kautilya's **Arthashastra** is an ancient Indian treatise on statecraft, economic policy, and military strategy. It utilizes terms like *Sitadhyaksha* (Superintendent of Agriculture) and deals extensively with state-owned and private lands, but it does not serve as the origin for this archaic Vedic religious term.

**Option (b) is the correct choice because the specific feminine term kshetra-patni originates as an agrarian deity invocation within the hymns of the Atharvaveda.**

Sources

<https://archive.org/details/atharvavedasamh00whitgoog/page/n109/mode/2up>

<https://www.sacred-texts.com/hin/av.htm>

21. Consider the following statements with reference to India's response to climate change:

I. India's Long-Term Low Emission Development Strategy (LT-LEDS) is a crucial tool for achieving net-zero emissions by 2070.

II. India's 4th Biennial Update Report (BUR-4) submitted in December, 2024 recorded around 8% decrease in Greenhouse gas emissions in 2020 over 2019.

III. Climate-resilient development necessarily depends on quick and short-term achievement of emission reduction targets.

Which of the following relationships among the above statements is/are correct?

1. Statement I is empirically supported by statement II.
2. Statement III contradicts the approach implicit in statement I.
3. Statement I and statement III together establish the premise of long-term sustainability.


Select the answer using the code given below:

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

**Answer: B**

**Explanation**

- **Statement I is Correct:** India formally submitted its Long-Term Low Greenhouse Gas Emission Development Strategy (LT-LEDS) to the UNFCCC, which explicitly outlines the country's strategic transition pathways to reach its milestone target of net-zero emissions by 2070.
- **Statement II is Correct:** India submitted its 4th Biennial Update Report (on December 30, 2024). The official dataset reveals that India's total Greenhouse Gas emissions decreased by **7.93** (approximately 8%) in the inventory year 2020 compared to 2019, primarily driven by a decoupling of economic growth from emissions intensity and targeted climate policy measures.
- **Statement III is Correct:** Climate-resilient and sustainable development does not rely *necessarily* or *exclusively* on short-term fixes. It demands long-term structural changes, sustained infrastructure transitions, and deep institutional decarbonization pathways rather than just immediate, short-sighted reductions.
- **Relationship 1 is Correct:** Statement I asserts that India has a strategic blueprint (LT-LEDS) aimed at net-zero. Statement II provides empirical, real-world data showing that India's actual carbon footprint dropped by nearly 8% showcasing measurable progress on its low-carbon path. Hence, Statement II serves as empirical validation supporting the broader strategic goal in Statement I.
- **Relationship 2 is Correct:** Statement I stands for a **long-term, phased strategy** spanning decades up to 2070. Conversely, Statement III posits that development necessarily depends on **quick and short-term** targets. This focus on immediate, short-term reduction directly contradicts the patient, long-term multi-decadal decarbonization architecture implicit in the LT-LEDS framework.

**Source: Climate Action Tracker**  <https://climateactiontracker.org/countries/india/net-zero-targets/>

**Source: UNFCCC Official Submission Portal**  <https://unfccc.int/documents/640706>

22. With respect to the Western Hoolock Gibbons, which of the following statements is/are correct ?

1. A Sanctuary in North-east India is home to this ape species listed as Endangered in the International Union for Conservation of Nature (IUCN) Red List.

2. They have specialized brachiation and can easily swing between trees.

3. They possess a strong and heavy build like gorillas, yet are remarkably agile tree climbers.

Select the answer using the code given below :

- (a) 1 only
- (b) 1 and 2

- (c) 2 and 3  
(d) 3 only

**Answer: B**

**Explanation**

**Statement 1 is Correct:** The Hoolongapar Gibbon Sanctuary in Assam (Northeast India) is home to the Western Hoolock Gibbon (*Hoolock hoolock*). They are listed as Endangered on the IUCN Red List of Threatened Species and are protected under Schedule I of the Indian Wildlife (Protection) Act, 1972.

**Statement 2 is correct:** Gibbons are the most specialized brachiators among all primates. When forced to the ground due to gaps in the canopy, they walk bipedally — they are naturally adapted for arboreal movement via arm-swinging (brachiation), and are clumsy only on the ground. Their long arms and lightweight build are precisely evolved for swinging efficiently between trees — this is their primary and most natural mode of locomotion

**Statement 3 is incorrect:** They are **lesser apes**, lightweight and slender — the complete opposite of gorillas, which are great apes with a heavy, muscular build.

Source

<https://www.downtoearth.org.in/mining/guardians-of-hollongapar>

**23. Which of the following best explain(s) the rationale for protecting mangrove ecosystems in the context of climate resilience ?**

1. Mangroves reduce tidal energy and store freshwater, making them ideal sites for paddy cultivation in saline estuarine belts.
2. Their salt-sensitive roots filter seawater, making mangroves key to converting coastal land into freshwater aquaculture zones.
3. By withstanding tidal surges and offering biomass resources, mangroves function both as natural bio-shields and livelihood bases for rural communities.

Select the answer using the code given below :

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

**Answer: D**

**Explanation**

- **Statement 1 is incorrect:** While mangroves do reduce tidal energy, the claim that they **store freshwater** or are **ideal for paddy cultivation** is wrong. Mangroves thrive in salty or brackish water and can tolerate regular tidal submersion — the exact opposite of freshwater paddy conditions. Clearing mangroves for agriculture is in fact one of the leading causes of their destruction.
- **Statement 2 is incorrect:** Mangrove roots are salt-excluding or salt-secreting — not "salt-sensitive." They do not filter seawater into freshwater, nor do they convert coastal land into freshwater aquaculture zones. This statement fundamentally misrepresents mangrove root physiology and ecological function.
- **Statement 3 is correct: As Bio-shields:** Mangrove forests can attenuate wave energy and protect coastal communities from coastal hazards including coastal erosion, tidal bores, wind and salt spray, and cyclones — a fact well established in tropical coastal ecology
  - **As Livelihood Bases:** Under sustainable management, mangroves provide many livelihood opportunities including shellfish gathering, fishing, and beekeeping for communities living alongside them. Their vast root systems also serve as protective shelter for vulnerable young marine life, supporting biodiversity and community livelihoods through reef tourism and offshore fishing

<https://www.worldwildlife.org/resources/explainers/wildlife-climate-heroes/mangroves-as-a-solution-to-climate-change/>

24. In what way(s) does the Vizhinjam International Seaport represent a structural shift in India's maritime trade and logistics policy?

1. By functioning exclusively as a domestic cargo hub to reduce reliance on coastal shipping and eliminate the need for foreign collaborations.
2. By focusing primarily on passenger cruise tourism and heritage shipping to increase Kerala's profile as a maritime heritage destination.
3. By leveraging its natural deep draft and strategic location to reduce dependence on foreign transshipment ports, enhance revenue retention, and reposition India in regional maritime trade.

Select the answer using the code given below:

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

**Answer: (d) 3 only**

Statement 1 — INCORRECT. Vizhinjam is India's first deep-water INTERNATIONAL container transshipment port, not a domestic cargo hub. Developed under a PPP model with Adani Ports, it is designed to receive ultra-large container vessels (18,000+ TEU capacity). Its entire commercial purpose is international transshipment, not domestic coastal shipping.

Statement 2 — INCORRECT. Vizhinjam has zero operational mandate for passenger cruise tourism or heritage shipping. This statement is wholly fabricated — the port is a container logistics facility.

Statement 3 — CORRECT. This precisely captures the structural shift. Vizhinjam has a natural deep draft of 20–24m requiring no capital dredging, and is positioned 10 nautical miles from the main East-West international shipping lane (Europe–Persian Gulf–Far East). Currently, ~75% of India's transshipment cargo goes to foreign ports (Colombo, Singapore), bleeding revenue abroad. Vizhinjam directly reduces this dependency, retains revenue within India, and elevates India's position in regional maritime trade.

AUTHORITATIVE SOURCES

- PIB, Ministry of Ports — <https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=2032811>
- Official Vizhinjam Port — <https://vizhinjamport.in/>
- Adani Ports — <https://www.adaniports.com/ports-and-terminals/vizhinjam-port>

**25. Identify the river of the Indian sub-continent on the basis of the following information :**

1. It has an antecedent drainage system.
2. It flows through three countries.
3. It originates in the Tibetan Plateau and is an important river for irrigation.
4. It does not form distributaries.

Select the answer from the following :

- (a) Brahmaputra
- (b) Indus
- (c) Sutlej
- (d) Teesta

**Answer: C**

**Explanation**

### 1. Antecedent Drainage System

An antecedent river is one that existed *before* the upliftment of the mountain range (the Himalayas) and maintained its original course by cutting steep, deep gorges as the mountains rose.

- **Brahmaputra, Indus, and Sutlej** are all classic examples of trans-Himalayan, antecedent rivers. Therefore, this clue eliminates Teesta (which originates lower down in Sikkim).

### 2. Flows through Three Countries

- **Indus:** China (Tibet), India, and Pakistan. (**3 countries**)
- **Brahmaputra:** China (Tibet), India, and Bangladesh. (**3 countries**)
- **Sutlej:** China (Tibet), India, and Pakistan. (**3 countries**)

### 3. Originates in the Tibetan Plateau & Important for Irrigation

- The **Indus** originates near Lake Manasarovar (Bokhar Chu glacier) in Tibet and forms the lifeblood of the massive Indus Basin irrigation network, particularly crucial for Pakistan and northwestern India.
- The **Brahmaputra** also originates in Tibet (Chemayungdung glacier), but its basin in India and Bangladesh is primarily characterized by high rainfall and flood management challenges rather than being predominantly driven by massive canal irrigation networks like the Indus.

**4. It does not form Distributaries**

- **Brahmaputra** joins the Ganga in Bangladesh to form the Padma and Jamuna, splitting into a massive network of distributaries that form the Sundarbans Delta before emptying into the Bay of Bengal.
- **Sutlej** does not empty into the sea on its own; it joins the Indus as part of the Mithankot *Panjnad* confluence. It is a *tributary*, not a principal river reaching the ocean to form or lack distributaries in this context.
- **Indus:** form a delta and some distributary channels near Karachi before draining into the Arabian Sea

**26. Identify the river of the Indian sub-continent on the basis of the following information :**

5. It has an antecedent drainage system.
6. It flows through three countries.
7. It originates in the Tibetan Plateau and is an important river for irrigation.
8. It does not form distributaries.

Select the answer from the following :

- (a) Brahmaputra
- (b) Indus
- (c) Sutlej
- (d) Teesta

**Answer: C**

**Explanation**

**1. Antecedent Drainage System**

An antecedent river is one that existed *before* the upliftment of the mountain range (the Himalayas) and maintained its original course by cutting steep, deep gorges as the mountains rose.

- **Brahmaputra, Indus, and Sutlej** are all classic examples of trans-Himalayan, antecedent rivers. Therefore, this clue eliminates Teesta (which originates lower down in Sikkim).

**2. Flows through Three Countries**

- **Indus:** China (Tibet), India, and Pakistan. (**3 countries**)
- **Brahmaputra:** China (Tibet), India, and Bangladesh. (**3 countries**)
- **Sutlej:** China (Tibet), India, and Pakistan. (**3 countries**)

**3. Originates in the Tibetan Plateau & Important for Irrigation**

- The **Indus** originates near Lake Manasarovar (Bokhar Chu glacier) in Tibet and forms the lifeblood of the massive Indus Basin irrigation network, particularly crucial for Pakistan and northwestern India.
- The **Brahmaputra** also originates in Tibet (Chemayungdung glacier), but its basin in India and Bangladesh is primarily characterized by high rainfall and flood management challenges rather than being predominantly driven by massive canal irrigation networks like the Indus.

**4. It does not form Distributaries**

- **Brahmaputra** joins the Ganga in Bangladesh to form the Padma and Jamuna, splitting into a massive network of distributaries that form the Sundarbans Delta before emptying into the Bay of Bengal.
- **Sutlej** does not empty into the sea on its own; it joins the Indus as part of the Mithankot *Panjnad* confluence. It is a *tributary*, not a principal river reaching the ocean to form or lack distributaries in this context.
- **Indus:** form a delta and some distributary channels near Karachi before draining into the Arabian Sea

**27. Which of the following statements with regard to the arrival of Amur Falcons at Doyang Lake in Nagaland each year from Mongolia is/are correct ?**

1. It showcases how sustained local conservation efforts can contribute to the arrival and protection of international migratory birds.
2. It reflects the global success of advanced tracking technologies that guide migratory birds back to their stopover sites.
3. It confirms that Amur Falcons have adapted to permanent residency in India due to favourable habitat changes.

Select the answer using the code given below :

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

**Answer: A**

**Statement 1 is correct:** On their 15,000-mile migration from the Amur region of Russia, China and Mongolia all the way to southern Africa, Amur Falcons make a pit stop at the Doyang Hydroelectric Reservoir in Nagaland. A conservation partnership between Wildlife Trust of India, local Village Council Members, the Amur Falcon Roosting Area Union, the Nagaland Forest Department, and the Stop Poaching Fund engineered a remarkable change , with zero mortality due to hunting recorded in successive years.

**Statement 2 is incorrect:** Migratory birds navigate using innate biological instincts — magnetic fields, celestial cues, and memory , not tracking devices. Satellite tagging of Amur Falcons such as Apapang, Alang, and Ahu was used to track and study the birds' movements across continents — it was a monitoring tool for scientists, not a navigation guide for birds. Tracking technology documents migration; it does not direct it.

**Statement 3 is incorrect:** . The Amur Falcon is known for its journey from breeding grounds in northeastern China, Mongolia and eastern Russia to wintering grounds in Africa. During migration, the birds stop in northeastern India before flying nonstop over 4,000 km across the Arabian Sea to Africa — the longest continuous ocean crossing among birds of prey.

Source

<https://www.wti.org.in/news/furthering-the-cause-of-amur-falcon-conservation-wti-hands-over-newly-constructed-eco-tourism-guest-house-to-pangti-village-council/>  
<https://thebetterindia.com/wildlife/nagaland-amur-falcon-conservation>

**28. Which among the following is/are the objective(s) of the Rainfed Area Development (RAD) initiative under the National Mission for Sustainable Agriculture (NMSA) ?**

1. Encouraging monoculture in rainfed areas
2. Increasing rice cultivation in irrigated regions
3. Enhancing productivity and minimising climatic risks through Integrated Farming Systems (IFS)

Select the answer using the code given below :

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

**Answer- D'**

**Explanation**

**Statement 1 is INCORRECT:** Rainfed areas are inherently vulnerable to erratic weather patterns and prolonged dry spells. Encouraging monoculture (growing a single crop year after year) significantly increases a farmer's vulnerability to total crop failure, pest outbreaks, and soil degradation. Instead, the RAD initiative actively promotes **crop diversification** and multi-cropping to build ecological and economic resilience.

**Statement 2 is INCORRECT:** The RAD initiative, as the name clearly implies, focuses strictly on **rainfed/un-irrigated agricultural ecosystems** (which cover about 51% of India's net sown area). It does not target irrigated regions, nor does it seek to expand water-intensive crops like traditional rice cultivation in areas with assured irrigation.

**Statement 3 is CORRECT:** The primary objective of the Rainfed Area Development (RAD) component is to introduce and popularize **Integrated Farming Systems (IFS)**. By integrating traditional crop cultivation with complementary practices like horticulture, livestock rearing, fisheries, poultry, and agro-forestry, the scheme ensures that if one component fails due to climate vagaries (like a delayed monsoon), other components generate income. This directly optimizes farm productivity and minimizes severe climatic risks.

**Sources**

<https://nmsa.dac.gov.in/>

<https://nmsa.dac.gov.in/RADIntroduction.aspx>

<https://agricoop.nic.in/en/programmes-schemes-listing/national-mission-sustainable-agriculture-nmsa>

**29.** Significant implication(s) of obtaining Oeko-Tex certification for Eri Silk in the global textile industry:

- 1) It allows Indian exporters to compete in high-end markets that prioritise chemical-free products;
- 2) It confirms that Eri Silk meets international safety, environmental, and quality standards, enabling its entry into premium eco-conscious markets.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: C**

**Explanation**

Oeko-Tex is a worldwide certification for textiles such as yarns, fabrics, buttons, linens, terry cloth, thread, and other accessory materials that tests for harmful substances in raw, semi-finished and finished textile materials and products. The Oeko-Tex certification ensures that the final product is safe for human use.

- **Statement 1 is correct:** The Oeko-Tex certification ensures international buyers that Eri Silk meets international safety and quality standards, boosting consumer confidence and facilitating its acceptance in high-end markets. It also ensures compliance with international requirements for textile safety, allowing Indian exporters to compete in high-end markets that prioritize eco-friendly and chemical-free products
- **Statement 2 is correct:** The Oeko-Tex certification is a rigorous standard that ensures textiles are tested for harmful substances and produced in environment-friendly conditions. Obtained directly from Germany by the North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC), it positions Eri Silk as a globally recognized, sustainable textile and opens new doors for penetrating the global export market.

Source

PIB

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2113212&reg=3&lang=2#:~:text=Oeko%2DTextile%20materials%20and%20products.>

**30.** Ships from which of the following countries have to cross the Strait of Hormuz to reach out to the Indian Ocean?

1. Bahrain
2. Syria
3. Qatar
4. Egypt

Select the answer using the code given below:

- (a) 1 and 2
- (b) 1 and 3

- (c) 2 and 3  
(d) 3 and 4

**Answer: (b) 1 and 3**

**Solution & explanation**

The Strait of Hormuz connects the Persian Gulf to the Gulf of Oman and the Arabian Sea. Only Persian Gulf nations need to cross it to reach the Indian Ocean.

**Bahrain (1) — MUST CROSS:** Island nation entirely within the Persian Gulf. Any outbound maritime route to the Indian Ocean must transit the Strait of Hormuz. **CORRECT.**

**Syria (2) — DOES NOT CROSS:** Syria has its coastline on the Mediterranean Sea. Syrian ships reach the Indian Ocean via the Suez Canal and Red Sea — the Strait of Hormuz is irrelevant to their route.

**Qatar (3) — MUST CROSS:** Qatar occupies a peninsula in the Persian Gulf. All Qatar-bound/outbound deep-sea traffic must transit the Strait of Hormuz to reach the Indian Ocean. **CORRECT.**

**Egypt (4) — DOES NOT CROSS:** Egypt has ports on both the Mediterranean and the Red Sea. Egyptian ships reach the Indian Ocean via the Bab-el-Mandeb at the southern end of the Red Sea, not via Hormuz.

**AUTHORITATIVE SOURCES**

- US EIA — Strait of Hormuz — [https://www.eia.gov/international/analysis/regions-of-interest/Strait\\_of\\_Hormuz](https://www.eia.gov/international/analysis/regions-of-interest/Strait_of_Hormuz)
- Encyclopaedia Britannica — Strait of Hormuz — <https://www.britannica.com/place/Strait-of-Hormuz>

**31. Tungurahua Volcano, declared a UNESCO Global Geopark in 2025, is situated in which one of the following countries?**

- (a) Ecuador  
(b) Peru  
(c) Bolivia  
(d) Colombia

**Answer: A**

**Explanation**

Tungurahua ('Throat of Fire' in Quechua) is an active stratovolcano located in the Cordillera Oriental of the Andes in Ecuador. Alongside the Napo Sumaco site (also added in 2025) and Imbabura (Ecuador's first geopark added in 2019), the addition of Tungurahua gives Ecuador a total of three designated Global Geoparks. This gives the country the highest density of UNESCO Global Geoparks relative to total land area in South America.



**32. With reference to Madhav National Park, which of the following statements is/are correct ?**

- 1) It was declared a Tiger Reserve in India in 2025;

- 2) Sakhya Sagar, which is designated as a Ramsar Site, is situated within this National Park;  
 3) Its area is shared between Madhya Pradesh and Rajasthan.
- (a) 1 only  
 (b) 1 and 2  
 (c) 2 and 3  
 (d) 3 only

**Answer: B**

**Explanation**

- **Statement 1 is Correct:** In March 2025, the Government of India, upon the recommendation of the National Tiger Conservation Authority (NTCA), officially notified **Madhav National Park** as the country's **58th Tiger Reserve** (and the 9th Tiger Reserve within the state of Madhya Pradesh). This designation is backed by an active tiger reintroduction program aimed at reviving the predator population in the Chambal region.
- **Statement 2 is Correct: Sakhya Sagar** (along with Madhav Sagar) is a prominent man-made reservoir located within the boundaries of the national park. It was created in 1918 by Sir Madhav Rao Scindia on the Manihar River. Due to its unique wetland ecosystem—which hosts a substantial population of marsh crocodiles and thousands of migratory waterfowl—it was officially designated as a **Ramsar Site** (Wetland of International Importance) in July 2022.
- **Statement 3 is Incorrect:** Madhav National Park is located entirely within the **Shivpuri district of Madhya Pradesh** (situated in the northern fringe of the Central Highlands and part of the Upper Vindhyan hill range). Its physical area is **not** shared with Rajasthan.

**33. With reference to the climate of Andaman and Nicobar Islands, which of the following statements is/are correct ?**

1. The climate can be defined as a humid, tropical coastal climate.
2. It receives rainfall from both South-west monsoon and North-east monsoon.
3. Maximum precipitation is between December and May.

Select the answer using the code given below :

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

**Answer: B**

**Explanation**

- **Statement 1 is correct:** The Andaman and Nicobar Islands are located in the Bay of Bengal near the equator, surrounded by sea on all sides. This gives them a **humid, tropical coastal climate** — characterized by high temperatures, high humidity, and heavy rainfall throughout the year. The maritime influence moderates temperature extremes, keeping it warm and moist year-round.
- **Statement 2 is correct:** The islands receive rainfall from **both monsoon systems**:
  - **South-West Monsoon** (May–September): The islands are among the first landmasses in India to receive the SW monsoon, typically around **late April or early May** — earlier than the mainland.
  - **North-East Monsoon** (October–December): The islands also receive significant rainfall during the retreating/NE monsoon season.
- **Statement 3 is incorrect:** The maximum precipitation over the Andaman and Nicobar Islands occurs between May and November (coinciding with the South-West monsoon and the onset of the North-East monsoon). Conversely, the period between January and April is traditionally considered the relatively dry season for the archipelago, characterized by clear skies and minimal rainfall.

**34. Which of the following geographical features or phenomena is/are associated with the Peninsular Block of India ?**

1. Submergence of parts of the western coast due to tectonic activity
2. Presence of residual mountain ranges such as the Veliconda hills and Mahendragiri hills
3. Deep, V-shaped river valleys formed by fast-flowing rivers

Select the answer using the code given below :

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

**Answer: B**

**Explanation**

- **Statement 1 is correct:** Since the Cambrian period, the Peninsula has been standing like a rigid block with the exception of some of its western coast which is submerged beneath the sea, and some other parts changed due to tectonic activity without affecting the original basement. As part of the Indo-Australian Plate, it has been subjected to various vertical movements and block faulting — the rift valleys of the Narmada, the Tapi and the Mahanadi, and the Satpura block mountains are examples of this.
- **Statement 2 is correct:** Relict and residual mountains such as the Aravali hills, Nallamala hills, Javadi hills, Veliconda hills, Palkonda range, and Mahendragiri hills characterize the Peninsular Block.
- **Statement 3 is incorrect:** Deep, V-shaped valleys formed by fast-flowing rivers are a characteristic of Himalayan rivers, not Peninsular rivers. The river valleys of the Peninsular Block are shallow with low gradients. Peninsular rivers are old, graded rivers flowing over hard, ancient rocks with little vertical erosion capacity — they form broad, shallow valleys, not deep V-shaped ones.

**35. Consider the following statements with reference to the Sagarmala Programme of the Government of India:**

- I. The Sagarmala Programme seeks to achieve port-led economic growth through cost-effective and sustainable coastal infrastructure.
- II. The success of the Sagarmala Programme is reflected in significant growth in coastal and inland waterway shipping, along with improved global port rankings.
- III. Sagarmala 2.0 aims to position India as a global maritime innovation hub aligned with Atmanirbhar Bharat and Viksit Bharat 2047 visions.

Which of the following relationships among the above statements is/are correct?

1. Statement II validates the effectiveness of the strategies envisioned in statement I.
2. Statement III extends the objectives of statement I by embedding them into a future-oriented innovation framework.
3. Statement I contradicts statement III by focusing only on traditional infrastructure instead of modern innovation.

Select the answer using the code given below:

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

**Answer- B**

**Explanation-**

**Relationship 1 is CORRECT:** Statement I outlines the foundational goal and strategic vision of the Sagarmala Programme (cost-effective, sustainable, port-led development). Statement II provides empirical metrics and real-world outcomes (e.g., more than a 115% increase in coastal shipping volumes, massive spikes in inland waterway cargo, and multiple Indian ports scoring spots in the

global Top 100 container port rankings). Therefore, the data in Statement II directly serves to validate the operational effectiveness of the core infrastructure strategies formulated in Statement I.

**Relationship 2 is CORRECT:** Statement III introduces the modernized avatar of the scheme— **Sagarmala 2.0** (alongside the *Maritime Amrit Kaal Vision 2047*). This next phase takes the traditional infrastructure objectives from Statement I and systematically elevates them into a future-ready, high-tech, and innovation-driven matrix. It embeds smart port automation, green shipping corridors, advanced shipbuilding, and the *Sagarmala Startup Innovation Initiative (S2I2)* into the structural vision for *Viksit Bharat 2047*. Thus, it acts as a clear progressive extension rather than an entirely disconnected framework.

**Relationship 3 is INCORRECT:** Statement I and Statement III do not contradict one another. They represent a deliberate evolutionary timeline. The foundational, physical coastal asset building of Sagarmala 1.0 (Statement I) provided the mandatory physical infrastructure baseline upon which the modern technological and digital innovations of Sagarmala 2.0 (Statement III) are being constructed.

**Source-** <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2115878>

<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154058&ModuleId=3>

### 36. Consider the following statements about *Rhynchostylis retusa* (Foxtail orchid) :

1. It is an epiphytic orchid.
2. The species is endemic to North-east India.
3. It is the State flower of Arunachal Pradesh and Assam.

Which of the statements given above is/are correct ?

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

**Answer: B**

#### Explanation

- **Statement 1 is correct:** *Rhynchostylis retusa* (Foxtail Orchid) is indeed an **epiphytic orchid** — meaning it grows on other plants (typically trees) for physical support without being parasitic, deriving moisture and nutrients from the air, rain, and surrounding debris. This is a well-established botanical characteristic of the species
- **Statement 2 is incorrect:** The species is not endemic to North-east India. *Rhynchostylis retusa* has a wide distribution across South Asia and Southeast Asia — including India, Sri Lanka, Myanmar, Thailand, Vietnam, Malaysia, Indonesia, the Philippines, and southern China. Within India, it is found not only in the Northeast but also in the Western Ghats, Odisha, and other forested regions.
- **Statement 3 is correct:** *Rhynchostylis retusa* (Foxtail Orchid) is the **State flower of both Arunachal Pradesh and Assam:**
  - In **Arunachal Pradesh**, it is known as *Foxtail Orchid* and holds state flower status.
  - In **Assam**, it is called "**Kopou Phool**" (কপৌ ফুল) and is deeply embedded in Assamese culture — famously worn by women during **Bihu festival**. It is the official State flower of Assam.

#### Source

<https://bsi.gov.in>

<https://assam.gov.in>

<https://arunachalpradesh.gov.in>

<https://cites.org/eng/resources/species.html>

**37.** Which one of the following statements with regard to the Moidams, built by the Tai-Ahom kingdom and inscribed as a World Heritage Site by UNESCO, is/are correct?

1. They acted as army fortresses.
2. They were recreation centres of the Royals and Nobles.
3. They were burial grounds of the Royals and Nobles.
4. They were battle drill centres of the Royals and Nobles.

Select the answer using the code given below:

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

**Answer (c) 3 only.**

**Statement 1 is Incorrect:** Moidams were not designed as army fortresses, military ramparts, or defensive installations. The Tai-Ahom kingdom used distinct structural systems like mud forts (*Garhs*) for defensive military operations.

**Statement 2 is Incorrect:** These structures held deep spiritual and solemn significance rather than serving as centers for royal leisure, banquets, or public recreation.

**Statement 3 is Correct: Moidams are the sacred burial mounds (tumuli) of the royals and nobles** of the Tai-Ahom kingdom. Located predominantly at Charaideo in Assam, they consist of a vaulted brick or stone chamber topped by a massive hemispherical earthen mound, creating a unique stepped pyramid-like appearance. They represent the specialized funerary architecture and ancestral soul- veneration practices of the Ahom community. In July 2024, the "Charaideo Moidams" were officially inscribed as a **UNESCO World Heritage Site**, making them India's 43rd World Heritage Site and the first cultural site from Northeast India to receive this status.

**Statement 4 is Incorrect:** Moidams were never used for military parades, martial arts training, or battle drills for the royal guard.

**Statement 3 is the only correct option because the Moidams of the Tai-Ahom kingdom were built exclusively as sacred royal burial grounds, which earned them recognition as a UNESCO World Heritage Site.**

**Sources**

<https://asiguwahaticircle.gov.in/publication/Chaaideo%20maidams.pdf>

**38. At the United Nations Ocean Conference (UNOC) held in June, 2025 in France, the Food and Agricultural Organization (FAO) of the United Nations demonstrated its leading voice on marine and ocean issues, especially on sustainable fisheries and aquaculture for resilient livelihood and "Blue Transformation".**

Which of the following combinations about the "Four Betters" proposed by FAO for "Blue Transformation" is correct ?

- (a) Better production, better nutrition, better environment and better ocean
- (b) Better production, better nutrition, better environment and better life
- (c) Better coral reefs, better nutrition, better environment and better life
- (d) Better estuaries, better nutrition, better environment and better mangrove vegetation

**Answer: B**

**Explanation**

FAO's extensive involvement at UNOC 2025 underscored its vision for a "Blue Transformation," positioning aquatic food systems as pivotal for achieving the Four Betters: better production, better nutrition, a better environment, and a better life — leaving no one behind. This approach is detailed in FAO's Strategic Framework 2022–31 and recognizes the intrinsic connection between ocean health and food security. FAO

**39. Which of the following statements with reference to Lake Turkana is/are correct ?**

1. It is the largest desert lake in the world.
2. The lake is situated in South Sudan along the eastern fringe of the Sahara desert.
3. The lake is listed as a UNESCO World Heritage Site and is also referred to as the 'Jade Sea'.

Select the answer using the code given below :

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

**Answer: B**

**Explanation**

- **Statement 1 is correct:** Lake Turkana is the **largest desert lake in the world** as well as the world's largest permanent desert lake. It is also the world's largest alkaline lake. Located in the Kenyan Rift Valley, it stretches about 290 km in length and covers approximately 6,405 sq km.
- **Statement 2 is incorrect:** Lake Turkana is located primarily in northwestern Kenya, with a small portion extending into southern Ethiopia. It is not in South Sudan.
- It lies along the East African Rift Valley, not "the eastern fringe of the Sahara Desert." The Sahara is a North/West African desert — Lake Turkana is in East Africa, in a semi-arid region.
- **Statement 3 is correct:** Lake Turkana is a UNESCO World Heritage Site, inscribed in 1997 as "Lake Turkana National Parks" (covering Sibiloi National Park and the South and Central Island National Parks around the lake). Popularly known as the "Jade Sea" due to the distinctive jade-green colour of its waters, caused by algae blooms (particularly Spirulina) and the mineral composition of the alkaline water.

**40. Which one of the following is the first Plan Vivo certified Reducing Emissions from Deforestation and Forest Degradation (REDD+) project in India ?**

- Uttarakhand REDD+ project
- ICFRE-ICIMOD Transboundary REDD+ project in North-Eastern Himalayas
- Khasi Hills Community REDD+ project
- Sikkim Mamley Kamrang Community REDD+ project

**Answer: C**

**Explanation**

Plan Vivo is an international certification standard for community-based ecosystem services and carbon projects. It focuses on:

- Community-led land stewardship
- Long-term livelihood benefits for rural/forest communities
- Biodiversity conservation alongside carbon sequestration

It is one of the most rigorous certifications for community forestry and REDD+ projects.

**The Khasi Hills Community REDD+ Project:**

- Located in the **Khasi Hills of Meghalaya**, Northeast India
- Implemented by the **Khasi Hills Autonomous District Council** in partnership with the **Meghalaya Basin Development Authority** and supported by **NESFAS (North East Slow Food and Agrobiodiversity Society)**
- It was certified under the **Plan Vivo Standard**, making it the **first Plan Vivo certified REDD+ project in India**
- The project protects community-owned sacred forests (*Law Kyntang*) and other forest areas in Meghalaya

**41. Which of the following statements with regard to genetic medicine is/are correct?**

- Genetic medicines correct/compensate for the faulty genes responsible for disease.
- Engineered viruses and lipid nanoparticles are used as carriers of the genetic medicine.
- Genetic medicines alter the entire DNA sequence.

Select the answer using the code given below :

- 1 only
- 2 and 3 only
- 1 and 2 only
- 1,2 and 3

**Correct Answer: (c) 1 and 2 only**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** Genetic medicines work by correcting or compensating for faulty genes. This is the foundational principle — they target the root genetic cause of a disease rather than just managing symptoms.

**Statement 2 — CORRECT:** Engineered viruses (viral vectors like AAV, lentivirus) and lipid nanoparticles (as used in mRNA therapies like COVID vaccines) are the two primary delivery mechanisms for genetic medicine.

**Statement 3 — INCORRECT:** Genetic medicines do NOT alter the entire DNA sequence. They target specific genes or sequences. Altering the entire DNA sequence is biologically impossible and contradicts the precision-based nature of gene therapy.

**Source:** NCERT Biology Class 12 (Biotechnology chapter);

<https://www.who.int/publications/i/item/9789240030060> ;

<https://medlineplus.gov/genetics/understanding/therapy/procedures/>

**42.** Which of the following statements with regard to Large Language Models (LLMs) used in machine learning is/are correct?

1. LLMs assign probabilities to the next possible words and then pick the one with the highest probability.
2. LLMs process data through mathematical optimization to minimise prediction errors.
3. LLMs produce unbiased outputs.

Select the answer using the code given below:

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

**Correct Answer: (b) 1 and 2 only**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** LLMs assign probabilities to the next possible token/word and select the one with highest probability — this is the core autoregressive mechanism of transformer-based LLMs.

**Statement 2 — CORRECT:** LLMs are trained using mathematical optimization (backpropagation + gradient descent) to minimize prediction error (loss function).

**Statement 3 — INCORRECT:** LLMs are well-documented to produce biased outputs, reflecting biases present in training data. This is one of the most widely acknowledged limitations of LLMs.

**Source:** NITI Aayog's "Responsible AI for All" report; Government of India's IndiaAI Mission documents;

**43.** Which of the following statements with regard to stealth technology is/are correct?

1. Stealth objects have a very small radar cross-section and are coated with Radar Absorbing Material.
2. Stealth objects can be detected using specific frequencies.
3. Stealth objects are coated with metamaterials to increase the scattering of electromagnetic radiation.

Select the answer using the code given below:

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

**Correct Answer: (c) 1 and 2 only**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** Stealth objects are designed with a very small Radar Cross-Section (RCS) and are coated with Radar Absorbing Material (RAM) to absorb radar waves rather than reflect them.

**Statement 2 — CORRECT:** Stealth objects can be detected using specific frequencies — particularly low-frequency radar bands (like VHF/UHF), which are less affected by stealth coatings. This is a known counter-stealth approach.

**Statement 3 — INCORRECT:** Stealth objects are coated with materials to **minimise/absorb** scattering of electromagnetic radiation, NOT increase it. Increasing scattering would make them more detectable — the exact opposite of the purpose.

**Source:**

<https://www.science.gov/topicpages/r/radar+absorbing+materials> ; <https://www.idsa.in/about-mp-idsa/system/files/monograph33.pdf>

44. Which of the following statements with regard to Black Boxes used in modern aircrafts is/are correct?

1. They carry a beacon emitting red light pulses to facilitate underwater detection.
2. They record both the cockpit voice and flight data.
3. Their memory units are made using either stainless steel or titanium.

Select the answer using the code given below:

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

**Correct Answer: (b) 2 and 3 only**

**Statement-wise analysis:**

**Statement 1 — INCORRECT:** Black Boxes emit an Underwater Locator Beacon (ULB) that emits **ultrasonic pings** (37.5 kHz), NOT red light pulses. While it does not emit a red light, the box itself is painted high-visibility international orange to easily spot amidst crash debris.

**Statement 2 — CORRECT:** Black boxes consist of two components — the **Flight Data Recorder (FDR)** which records flight parameters, and the **Cockpit Voice Recorder (CVR)** which records cockpit audio. Both are part of the "black box" system.

**Statement 3 — CORRECT:** The memory units of black boxes are encased in extremely strong materials — either **stainless steel or titanium** — to withstand crash impacts, high temperatures, and deep-sea pressure.

**Source:**

[https://www.nts.gov/news/Pages/cvr\\_fdr.aspx](https://www.nts.gov/news/Pages/cvr_fdr.aspx)

45. Which of the following statements with regard to Green Hydrogen is/are correct?

1. It is decarbonized hydrogen obtained from natural gas reforming combined with carbon capture and storage (CCS).
2. It is produced using electrolysis of water with electricity generated by renewable energy.
3. National Green Hydrogen Mission of India aims for abatement of nearly 50 MMT of annual greenhouse gas emissions by 2030.

Select the answer using the code given below:

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

**Correct Answer: (b) 2 and 3 only**

**Statement-wise analysis:**

**Statement 1 — INCORRECT:** What is described in Statement 1 is **Blue Hydrogen** — produced from natural gas reforming (SMR) combined with Carbon Capture and Storage (CCS). Green Hydrogen is produced exclusively through electrolysis powered by renewable energy.

**Statement 2 — CORRECT:** Green Hydrogen is produced by electrolysis of water using electricity generated from renewable energy sources (solar, wind, etc.), emitting zero carbon in the process.

**Statement 3 — CORRECT:** The National Green Hydrogen Mission (NGHM), launched in January 2023, targets abatement of nearly 50 MMT (Million Metric Tonnes) of annual greenhouse gas emissions by 2030, along with 5 MMT/year production target.

**Source:** Ministry of New and Renewable Energy (MNRE) — National Green Hydrogen Mission official document:

<https://cdnbbsr.s3waas.gov.in/s3716e1b8c6cd17b771da77391355749f3/uploads/2023/01/2023012338.pdf>

46. Consider the following statements with regard to involvement of private entities in India's space programme:

1. The Indian National Space Promotion and Authorisation Centre (IN-SPACe) is an autonomous agency formed to facilitate participation of private entities.
2. Agnikul Cosmos launched the world's first flight using 3D-printed rocket engine.
3. Skyroot Aerospace has developed liquid fuel for GSLV.

Which of the statements given above is/are correct?

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

**Correct Answer: (c) 1 and 2 only**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** IN-SPACe (Indian National Space Promotion and Authorisation Centre) was established under the Department of Space as an autonomous and independent nodal agency to facilitate, promote and authorize private sector participation in space activities.

**Statement 2 — CORRECT:** Agnikul Cosmos successfully launched **Agnibaan SORTeD** — the world's first flight using a single-piece 3D-printed rocket engine (Agnilet) — in May 2024 from Sriharikota.

**Statement 3 — INCORRECT:** Skyroot Aerospace developed the **Vikram-S** rocket (using solid fuel), not liquid fuel for GSLV. GSLV is an ISRO vehicle. Skyroot has been working on its own Vikram series, not GSLV fuel systems.

**Source:**

<https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1887687&reg=3&lang=2>

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2022161&reg=3&lang=2>

47. Which of the following statements with regard to drone swarms is/are correct?

1. They use Terahertz band of frequency to communicate with the command centre.
2. Individual drones in the swarm can communicate with other drones in the swarm.
3. GPS Spoofing is a commonly used technique to counter drone swarm attack.

Select the answer using the code given below:

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

**Correct Answer: (b) 2 and 3 only**

**Statement-wise analysis:**

**Statement 1 — INCORRECT:** Drone swarms typically communicate using **radio frequency bands** (RF) such as 2.4 GHz or 5.8 GHz, or specialized military bands — **not Terahertz band**. Terahertz communication is still largely experimental and not used operationally in drone swarms.

**Statement 2 — CORRECT:** In a drone swarm, individual drones can communicate with each other (peer-to-peer) using mesh networking protocols, enabling decentralized coordination and collective decision-making.

**Statement 3 — CORRECT:** GPS Spoofing — sending false GPS signals to mislead drone navigation — is indeed a commonly used and well-documented counter-drone swarm technique, alongside jamming and directed energy weapons.

**Source:**

<https://www.itu.int/pub/S-JNL-VOL2.ISSUE7-2021-A01>

<https://www.tetcos.com/drone-swarm-comm.html>

<https://www.orfonline.org/research/developing-an-effective-anti-drone-system-for-indias-armed-forces-68001>

<https://idrw.org/indias-d4-anti-drone-system-gains-global-attention-after-success-in-pakistan-conflict/>

48. Which of the following statements with regard to GenomeIndia Project is/are correct?

1. It is a part of the Human Genome Project.
2. The project is funded by the Department of Biotechnology (DBT), Government of India.
3. Its primary aim is to build a catalogue of genetic diversity of the Indian population.

Select the answer using the code given below:

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

**Correct Answer: (b) 2 and 3 only**

**Statement-wise analysis:**

**Statement 1 — INCORRECT:** GenomeIndia is **NOT a part of the Human Genome Project** (HGP). The HGP was an international project completed in 2003. GenomeIndia is an independent Indian initiative launched in 2020, specifically aimed at mapping the genetic diversity of the Indian population.

**Statement 2 — CORRECT:** The GenomeIndia Project is funded and led by the **Department of Biotechnology (DBT)**, Government of India, with a consortium of 20 institutions participating.

**Statement 3 — CORRECT:** The primary aim of GenomeIndia is to build a comprehensive catalogue of genetic diversity of the Indian population — covering the vast ethnic, linguistic, and geographic diversity of India's 1.4 billion people — to enable precision medicine and population-specific research.

**Source:**

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2125504&reg=3&lang=2>

49. Which of the following statements with regard to the National Quantum Mission (NQM) is/are correct?

1. It aims at developing intermediate-scale quantum computers with 50 – 1000 physical qubits.
2. Its implementation includes setting up of four Thematic Hubs (T-Hubs) in academic and national R&D institutes across India.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Correct Answer: (c) Both 1 and 2**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** The NQM explicitly aims at developing intermediate-scale quantum computers with **50–1000 physical qubits** within 8 years (by 2031), clearly specified in the mission document approved by the Cabinet in April 2023.

**Statement 2 — CORRECT:** The NQM includes setting up **four Thematic Hubs (T-Hubs)** in top academic and national R&D institutions across India, covering domains of Quantum Computing, Quantum Communication, Quantum Sensing & Metrology, and Quantum Materials & Devices.

**Source:**

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1917888&reg=3&lang=2>

50. Which of the following statements with regard to India's Deep Ocean Mission is/are correct?

1. It was launched by the Ministry of Ports, Shipping and Waterways, Government of India.
2. Matsya-6000 has been designed to carry 3 people for deep sea exploration.
3. Samudrayaan is a project under this mission.

Select the answer using the code given below:

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

**Correct Answer: (b) 2 and 3 only**

**Statement-wise analysis:**

**Statement 1 — INCORRECT:** India's Deep Ocean Mission was launched by the **Ministry of Earth Sciences**, NOT the Ministry of Ports, Shipping and Waterways. This is a commonly tested factual distinction.

**Statement 2 — CORRECT: Matsya-6000** is India's indigenous manned submersible being developed under the Deep Ocean Mission, designed to carry **3 people** to a depth of 6000 metres for deep-sea exploration.

**Statement 3 — CORRECT: Samudrayaan** is indeed the manned deep-ocean mission project under the Deep Ocean Mission, similar in concept to ISRO's Gaganyaan but for the ocean.

**Source:**

<https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1942909&reg=3&lang=2>

51. Mr. X, a senior officer, was overseeing a critical vaccination programme during a pandemic. He found that a private service provider responsible for vaccine distribution was compromising on quality to make profits. Despite immense pressure to manage the issue due to vested interests, he raised his voice based on the principles of public administration which he learnt during various training programmes attended across his career. He reported the issue to the appropriate vigilance authority and halted the contract to ensure citizen welfare. Which one among the following principles of public administration was most strongly demonstrated by Mr. X's actions?

- (a) Esprit de corps
- (b) Equity
- (c) Accountability
- (d) Delegation

**Correct Answer: (c) Accountability**

**Solution and Explanation**

Mr. X's actions display three observable accountability behaviours simultaneously: (i) he held the private vendor answerable for quality compromise, (ii) he reported upward to the vigilance authority — the constitutionally and administratively designated body to receive such complaints, and (iii) he halted the contract in the public interest despite vested-interest pressure. This is the textbook definition of accountability in public administration — the obligation of a public servant to answer for the exercise of authority entrusted to them, with citizens as the ultimate principal.

**Why the other options fail:**

- **Esprit de corps** — Henri Fayol's 14th principle. It refers to building team spirit and unity within the organisation. Mr. X's action is directed at an external vendor and a vigilance authority, not at fostering internal team harmony. Wrong fit.
- **Equity** — Fayol's 11th principle, dealing with fairness in treatment of employees and stakeholders. Mr. X is not demonstrating equal treatment of parties; he is holding a defaulting vendor responsible. Equity is tangential at best.
- **Delegation** — Refers to transfer of authority downward. Mr. X is doing the opposite — he is personally taking ownership and escalating, not delegating the matter.

**Sources**

1. Second Administrative Reforms Commission, 11th Report on Promoting e-Governance, DARPG — <https://darpg.gov.in/sites/default/files/promoting-e-governance11.pdf>
2. DoPT Civil Services Code of Ethics — <https://dopt.gov.in/sites/default/files/ch-09.pdf>

3. Central Vigilance Commission Vigilance Manual (2021) — <https://cvc.gov.in/sites/default/files/VigManVol1.pdf>

52. In a multi-ethnic district where economic competition and historical grievances frequently led to community tensions, a flashpoint has arisen when a Government decision to allocate land for a waste management facility near a tribal hamlet sparked protests by the tribal community, which claimed the land was sacred and critical to their cultural identity. Urban residents and local industries supported the project citing severe solid waste challenges and health concerns. As a responsible Government official, you are tasked with resolving the situation through mediation. Consider the statements:

- (1) A successful conflict resolution process must begin with acknowledging the cultural concerns of the protesting tribal community before discussing technical alternatives.
  - (2) The Government should move ahead with the project without delay to address urban health concerns, which outweigh the sentiments of a small group.
  - (3) Creating a multi-stakeholder dialogue platform — tribal leaders, environmental experts, and municipal representatives — to build mutual understanding.
  - (4) Conducting an independent Environmental and Social Impact Assessment (ESIA) and sharing findings transparently. Which of the statements above would contribute to the resolution process?
- (a) 1, 3 and 4 only
  - (b) 2, 3 and 4 only
  - (c) 1 and 2 only
  - (d) 1, 2, 3 and 4

**Correct Answer: (a) 1, 3 and 4 only**

**Solution and Explanation**

**Statement 1 — CORRECT (contributes to resolution):**

Acknowledging cultural concerns of the tribal community first is foundational. UNDRIP Article 8 and the Forest Rights Act, 2006 Section 4(2)(e) both require free, prior and informed consent of tribal communities for any displacement or alteration of their cultural sites. Sequencing matters: technical alternatives presented before cultural acknowledgement come across as manipulation, not mediation.

**Statement 2 — INCORRECT (will worsen the conflict):**

Brutal reality — calling tribal concerns ‘sentiments of a small group’ is the precise majoritarian framing that has caused conflicts to escalate from Niyamgiri to Hasdeo Arand. The Supreme Court in *Orissa Mining Corporation v. Ministry of Environment and Forest* (2013) — the Niyamgiri verdict — categorically rejected this approach, holding that Gram Sabha consent of the affected tribal community is constitutionally mandated. Bulldozing through legitimate concerns triggers blockades, litigation and political costs that delay the project far more than mediation would.

**Statement 3 — CORRECT:**

Multi-stakeholder dialogue platforms work because conflicts are sustained when groups talk at each other, not with each other. The 2nd ARC's 7th Report on Capacity Building for Conflict Resolution explicitly recommends institutional mediation platforms including affected communities, technical experts, and civic representatives.

**Statement 4 — CORRECT:**

An independent ESIA shared transparently shifts the discussion from emotion to evidence. EIA Notification 2006 and the National Green Tribunal jurisprudence consistently uphold ESIA as the legal-procedural backbone for siting decisions involving public health and tribal rights.

**Sources**

1. Forest Rights Act, 2006, Ministry of Tribal Affairs — <https://tribal.nic.in/FRA.aspx>
2. *Orissa Mining Corporation v. MoEF* (2013) 6 SCC 476 — Supreme Court of India — <https://main.sci.gov.in/judgments>
3. Second ARC, 7th Report on Capacity Building for Conflict Resolution — [https://darpg.gov.in/sites/default/files/capacity\\_building7.pdf](https://darpg.gov.in/sites/default/files/capacity_building7.pdf)
4. EIA Notification 2006, Ministry of Environment, Forest and Climate Change — <https://moef.gov.in/wp-content/uploads/2018/03/EIA-Notification-2006.pdf>

53. Ms. X is a mid-level civil service official in the urban development department of a major city. She was involved in approving a contract for a public infrastructure project — a new community park. During approval she received confidential information that one of the shortlisted contractors had a history of poor workmanship and allegations of corruption in other cities, though nothing had been legally proven. The Head of the Department, Mr. Y, advised her not to disclose the information to the project committee or the public as it could delay the project and damage the city's reputation. Ms. X believed that withholding such information compromised transparency and public trust. What should Ms. X do now? (1) Immediately disclose the information to the project committee and the public. (2) Recommend removing the contractor from the shortlist to protect the project's integrity. (3) Propose a 'limited disclosure' to an oversight committee, while keeping the information confidential from the public for the time being.

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

**Answer: (c) 2 and 3 only [DICEY - can be b.]**

**Solution and Explanation**

*The core ethical tension: transparency versus due process when allegations are unproven and the information is confidential.*

**Statement 1 — INCORRECT (immediate public disclosure):**

Three reasons it fails the ethics test. First, the allegations are legally unproven; broadcasting them publicly amounts to defamation and could be challenged under Section 356 BNS, 2023. Second, the information is marked confidential — leaking it violates Official Secrets Act provisions and DoPT conduct rules. Third, premature public disclosure damages the reputation of an entity that may eventually be cleared, which is itself a public harm. Whistleblowing has procedural channels for a reason.

**Statement 2 — CORRECT:**

Recommending removal from the shortlist on administrative-prudence grounds (history of poor workmanship is a legitimate procurement criterion under GFR 2017, Rule 173) is the right call. The contractor's past performance is a permissible factor in pre-qualification screening, independent of unproven corruption claims.

**Statement 3 — CORRECT:**

A limited disclosure to an oversight committee — the Chief Vigilance Officer, the Procurement Committee, or under the Whistle Blowers Protection Act, 2014 — is the textbook procedurally-sound path. It brings the information into the institutional accountability loop without unfairly exposing unproven allegations to public trial-by-rumour.

**Brutal reality:**

Mr. Y's 'advice' to suppress is itself an ethical violation. But Ms. X correcting it through immediate public disclosure would be over-correction. The right answer threads the needle — internal escalation plus procurement integrity, without public trial-by-rumour.

**Sources**

1. General Financial Rules, 2017 (Rule 173 on past performance), Department of Expenditure — [https://doe.gov.in/sites/default/files/GFR2017\\_0.pdf](https://doe.gov.in/sites/default/files/GFR2017_0.pdf)
2. Whistle Blowers Protection Act, 2014, India Code — <https://www.indiacode.nic.in/handle/123456789/2080>
3. Central Vigilance Commission Manual on Procurement, 2021 — <https://cvc.gov.in>
4. Second ARC, 4th Report on Ethics in Governance — <https://darpg.gov.in/sites/default/files/ethics4.pdf>

54. 'X' was addressing a seminar on the meaning of the term 'law' as provided under Article 13, Part III of the Constitution of India. 'X' explained that the meaning of the term 'law' in the Constitution of India was very comprehensive. It included ordinances, orders and even rules and regulations. 'Y' pointed out that the term 'law' in Article 13 also included custom or usage having in the territory of

India the force of law, to which 'X' was not convinced. Based on the above, select the correct conclusion:

- (a) 'X' is correct in the interpretation of law, including the view on non-inclusion of custom.
- (b) The view of 'Y' that 'law' included custom is not correct.
- (c) The views of both 'X' and 'Y' are correct.
- (d) The view of only 'Y' is correct.

**Answer: (d) The view of only 'Y' is correct.**

#### **Solution and Explanation**

This question hinges on the exact text of Article 13(3)(a) of the Constitution of India:

*"law' includes any Ordinance, order, bye-law, rule, regulation, notification, custom or usage having in the territory of India the force of law."*

**So the definitive position: custom or usage having the force of law IS part of 'law' under Article 13.**

#### **X's position decoded:**

X correctly identifies ordinances, orders, rules and regulations as included. But X is not convinced about custom being included — meaning X actively rejects custom's inclusion. That rejection is wrong as per the bare text.

#### **Y's position decoded:**

Y supplements X's list by adding custom or usage. Y's full position (ordinances + orders + rules + regulations + custom) matches Article 13(3)(a) precisely.

#### **Why each option:**

- (a) WRONG — X is correct only on the partial list but wrong on excluding custom. So saying X is 'correct' overall, including the non-inclusion of custom, is factually wrong.
- (b) WRONG — Y is correct. The text of Article 13(3)(a) explicitly includes custom.
- (c) WRONG — X and Y hold contradictory positions on whether custom is included. They cannot both be correct simultaneously.
- (d) CORRECT — Y's complete view aligns with the constitutional text. X's incorrect rejection of custom makes only Y the holder of the right interpretation.

*Note: The Supreme Court in Shri Krishna Singh v. Mathura Ahir (1980) and the Bombay High Court in State of Bombay v. Narasu Appa Mali (1952) have engaged with what qualifies as 'custom or usage having force of law' under Article 13 — confirming custom's role within Article 13's definition.*

#### **Sources**

1. Constitution of India, Article 13, India Code, Legislative Department — <https://www.indiacode.nic.in/handle/123456789/15240>
2. Shri Krishna Singh v. Mathura Ahir, AIR 1980 SC 707 — Supreme Court Judgements Portal — <https://main.sci.gov.in/judgments>
3. M.P. Jain, Indian Constitutional Law (LexisNexis) — discussion of Article 13 — <https://www.indiacode.nic.in/handle/123456789/15240>

55. Consider the following statements with reference to the Constitution of India: (1) There is no Article in the Constitution of India that specifies that the Constitution of India will be officially called the 'Constitution of India'. (2) There is no Article in the Constitution of India that specifies that the Indian Independence Act, 1947 and the Government of India Act, 1935 stand repealed. (3) There is no Article in the Constitution of India that mentions 26th January, 1950 as the date of the commencement of the Constitution of India. Which one of the following conclusions based on the above statements is correct?

- (a) All three statements are correct.
- (b) There is no correct statement.
- (c) There are two correct statements that include statement 3.
- (d) There is only one correct statement.

**Answer: (b) There is no correct statement.**

#### **Solution and Explanation**

Each 'negative' statement claims an absence in the Constitution. Each is demolished by a specific Article — so each statement is false.

**Statement 1 — FALSE:**

**Article 393** of the Constitution reads: 'Short title.—This Constitution may be called the Constitution of India.' So an Article exists.

**Statement 2 — FALSE:**

**Article 395** reads: 'Repeals.—The Indian Independence Act, 1947, and the Government of India Act, 1935, together with all enactments amending or supplementing the latter Act, but not including the Abolition of Privy Council Jurisdiction Act, 1949, are hereby repealed.' So an Article exists.

**Statement 3 — FALSE:**

**Article 394** reads: 'Commencement.—This article and articles 5, 6, 7, 8, 9, 60, 324, 366, 367, 379, 380, 388, 391, 392 and 393 shall come into force at once, and the remaining provisions of this Constitution shall come into force on the twenty-sixth day of January, 1950, which day is referred to in this Constitution as the commencement of this Constitution.' So an Article exists.

**All three statements are factually wrong, hence none is correct — option (b).**

*This is a classic UPSC 'stem-flip' question: a candidate who knows that Articles 393, 394 and 395 exist will instinctively read the statements wrongly and pick (a). The trap is in reading 'There is no Article...' as the assertion. Slow reading wins this question.*

**Sources**

1. Constitution of India — Articles 393, 394, 395, Legislative Department, Ministry of Law and Justice — <https://legislative.gov.in/constitution-of-india/>
2. India Code — Constitution of India (full text) — <https://www.indiacode.nic.in/handle/123456789/15240>

56. Which of the following statements with regard to the persons with disabilities in India is/are correct? (1) The Rights of Persons with Disabilities Act, an Act passed by the Parliament of India in 2018, mandates reservation in education and employment, places a legal duty on Governments to ensure accessibility and non-discrimination. (2) The Sugamya Bharat Abhiyan focuses on achieving universal accessibility for Persons with Disabilities across three key domains — built infrastructure, transport systems and information and communication technology. (3) The National Divyangjan Finance and Development Corporation (NDFDC) is a public sector organisation set up by the Ministry of Corporate Affairs as a not-for-profit company to promote entrepreneurship among Persons with Disabilities (PwDs).

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

**Correct Answer: (b) 2 only**

**Solution and Explanation**

**Statement 1 — INCORRECT (year is wrong):**

The Rights of Persons with Disabilities Act was passed by the Rajya Sabha on 14 December 2016 and by the Lok Sabha on 16 December 2016, received Presidential assent on 27 December 2016, and was notified on 28 December 2016. The Act is officially the 'Rights of Persons with Disabilities Act, 2016' — Act No. 49 of 2016. The substantive content of the statement (reservation in education and employment, duty on Governments) is otherwise correct, but the year '2018' is factually wrong. In UPSC, a single factually wrong element makes the entire statement incorrect.

**Statement 2 — CORRECT:**

The Department of Empowerment of Persons with Disabilities (DEPwD) confirms on its FAQ page that Sugamya Bharat Abhiyan (Accessible India Campaign), launched on 3 December 2015, has three verticals: Built Environment, Transportation Sector, ICT Ecosystem — exactly matching the statement.

**Statement 3 — INCORRECT (wrong ministry):**

NDFDC is a Central Public Sector Undertaking under the Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment — NOT the Ministry of

Corporate Affairs. It was registered under Section 25 of the Companies Act, 1956 (now Section 8 of the Companies Act, 2013) on 24 January 1997 as a not-for-profit company. The 'not-for-profit' descriptor in the statement is correct, but the controlling ministry is misattributed.

#### Sources

1. The Rights of Persons with Disabilities Act, 2016 — India Code (PDF) — [https://www.indiacode.nic.in/bitstream/123456789/15939/1/the\\_rights\\_of\\_persons\\_with\\_disabilities\\_act\\_2016.pdf](https://www.indiacode.nic.in/bitstream/123456789/15939/1/the_rights_of_persons_with_disabilities_act_2016.pdf)
2. PIB Release dated 16 December 2016 — Rights of Persons with Disabilities Bill-2016 Passed by Parliament — <https://www.pib.gov.in/newsite/printrelease.aspx?relid=155592>
3. Department of Empowerment of Persons with Disabilities, FAQs on Accessible India Campaign — <https://depwd.gov.in/en/faqs-4/>
4. NDFDC Official Website — Our Organisation page — <https://ndfdc.nic.in/about-ndfdc/our-organisation>
5. PIB Feature Article on Sugamya Bharat Abhiyan — <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2079826>

57. Consider the following statements about the provisions pertaining to the Scheduled Castes and the Scheduled Tribes in India: (1) Provisions regarding the administration of the Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram are given in the Fifth Schedule of the Constitution of India. (2) Some tribes of India are entitled to exemption from paying Income Tax on certain incomes. (3) The Constitution of India provides for reservation of seats in Panchayats for women belonging to the Scheduled Castes and the Scheduled Tribes.

- (a) There are two correct statements, that include statement 2.
- (b) There are two correct statements, that are statements 1 and 3.
- (c) There is only one correct statement.
- (d) All three statements are correct.

**Answer: (a) There are two correct statements, that include statement 2.**

#### Solution and Explanation

##### Statement 1 — INCORRECT:

This is the classic Fifth–Sixth Schedule confusion. The Sixth Schedule (Article 244(2) and 275(1)) deals with administration of Tribal Areas in Assam, Meghalaya, Tripura and Mizoram — through Autonomous District Councils and Autonomous Regional Councils. The Fifth Schedule (Article 244(1)) covers 'Scheduled Areas' in other states (Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Telangana). The statement swaps the two.

##### Statement 2 — CORRECT:

Section 10(26) of the Income Tax Act, 1961 exempts members of Scheduled Tribes residing in specified areas (parts of Sixth Schedule areas in Assam, Meghalaya, Tripura, Mizoram; the States of Arunachal Pradesh, Manipur, Mizoram, Nagaland, Tripura; and Ladakh) from income tax on income arising from any source in those areas or by way of dividend or interest on securities. So 'some tribes' are indeed exempt on 'certain incomes' — matches exactly.

##### Statement 3 — CORRECT:

Article 243D(2) of the Constitution mandates: 'Not less than one-third of the total number of seats reserved under clause (1) shall be reserved for women belonging to the Scheduled Castes or, as the case may be, the Scheduled Tribes.' This is exactly what the statement claims.

**So Statements 2 and 3 are correct. The conclusion 'there are two correct statements, that include statement 2' matches.**

*Why option (b) fails: it claims the two correct are 1 and 3, but 1 is wrong because of the Fifth/Sixth Schedule swap.*

#### Sources

1. Constitution of India — Sixth Schedule (Articles 244(2), 275(1)) — <https://www.indiacode.nic.in/handle/123456789/15240>
2. Constitution of India — Article 243D — <https://www.constitutionofindia.net/articles/article-243d-reservation-of-seats/>

3. Income Tax Act, 1961, Section 10(26) — Income Tax Department, Government of India — <https://incometaxindia.gov.in/Pages/acts/income-tax-act.aspx>
4. Ministry of Tribal Affairs — Fifth and Sixth Schedule explainer — <https://tribal.nic.in/>

58. Consider the following statements in respect of questions asked by the Members in the Parliament of India: (1) Unstarred questions are those to which a Member desires an oral answer in the House. (2) Starred questions are those to which a Member desires a written answer. (3) No supplementary question can be asked on an unstarred question.

- (a) All three statements are correct.
- (b) There are two correct statements, that include statement 2.
- (c) There is only one correct statement.
- (d) There is no correct statement.

**Correct Answer: (c) There is only one correct statement.**

#### **Solution and Explanation**

The question deliberately inverts the standard definitions.

#### **Statement 1 — INCORRECT (inverted):**

Unstarred questions are those to which a Member desires a WRITTEN answer — not oral. They are not called for oral reply in the House; the answer is laid on the Table in writing.

#### **Statement 2 — INCORRECT (inverted):**

Starred questions are those to which a Member desires an ORAL answer in the House — marked with an asterisk (hence 'starred'). They are answered orally and are open to supplementary questions.

#### **Statement 3 — CORRECT:**

Since unstarred questions are answered in writing and not orally taken up in the House, no supplementary question can be asked on an unstarred question. Supplementaries are only permissible after oral answers — i.e., on starred questions. This is per Rules 41 and 43 of the Rules of Procedure and Conduct of Business in the Lok Sabha.

**Only Statement 3 stands. The conclusion 'there is only one correct statement' matches — option (c).**

#### **Sources**

26. Lok Sabha Secretariat, Rules of Procedure and Conduct of Business in Lok Sabha (Chapter VII, Rules 38–54 on Questions) — <https://eparlib.nic.in/handle/123456789/761340>
27. Parliament of India — Questions in Parliament explainer — <https://loksabha.nic.in/Questions/QResult15.aspx>
28. PRS Legislative Research — Questions in Parliament — <https://prsindia.org/parliamenttrack/parliament-meta/questions-in-parliament>

59. Consider the following statements about the Committee on the Welfare of Scheduled Castes and Scheduled Tribes of the Parliament of India: (1) Although members of this Committee are elected from both Houses of Parliament, the Chairperson of this Committee is appointed by the Chairman of the Rajya Sabha. (2) Twenty members are elected by the Rajya Sabha and ten members by the Lok Sabha. (3) No Minister, except for the Union Minister of Social Justice and Empowerment, is eligible to be a member of this Committee. (4) Members are elected for a fixed term of two years from the date they enter their office.

- (a) There are four correct statements.
- (b) There is only one correct statement, that is statement 2.
- (c) There are two correct statements, that include statement 1.
- (d) There is no correct statement.

**Correct Answer: (d) There is no correct statement.**

#### **Solution and Explanation**

This is a comprehensive trap question — every statement has a precise factual flip.

#### **Statement 1 — INCORRECT:**

The Chairperson is appointed by the Speaker of the Lok Sabha from amongst the Members of the Committee — not the Chairman of the Rajya Sabha. By convention, the Chairperson is a Lok Sabha member.

**Statement 2 — INCORRECT (inverted):**

The Committee has 30 members — 20 are elected by Lok Sabha and 10 by Rajya Sabha, both through proportional representation by single transferable vote. The statement swaps them.

**Statement 3 — INCORRECT:**

Rule 331-C of the Lok Sabha Rules clearly states: 'A Minister shall not be elected as a member of the Committee.' There is NO exception for any Minister — including the Union Minister of Social Justice and Empowerment. If a member is later appointed as a Minister, they cease to be on the Committee from that date.

**Statement 4 — INCORRECT:**

The term of the Committee is one year, not two years. Annual reconstitutions reported in 2024–25 by national dailies confirm this.

**All four statements fail — hence (d) There is no correct statement.**

**Sources**

29. Lok Sabha Rules of Procedure — Rules 331-C to 331-K, Lok Sabha Secretariat — <https://eparlib.nic.in/handle/123456789/761340>

30. Rajya Sabha at Work, Chapter 25, Rajya Sabha Secretariat — <https://cms.rajyasabha.nic.in/UploadedFiles/Procedure/RajyaSabhaAtWork/English/834-967/CHAPTER25.pdf>

31. Committee on Welfare of SC/STs Report No. 18 (2025) — Parliament Library — [https://eparlib.sansad.in/bitstream/123456789/2989596/1/18\\_Welfare\\_of\\_Scheduled\\_Castes\\_and\\_Scheduled\\_Tribes\\_3.pdf](https://eparlib.sansad.in/bitstream/123456789/2989596/1/18_Welfare_of_Scheduled_Castes_and_Scheduled_Tribes_3.pdf)

32. Deccan Herald — Parliamentary Panels Get to Work (2024) — <https://www.deccanherald.com/india/from-jal-jeevan-mission-review-to-policy-on-obcs-parliamentary-panels-get-to-work-3181593>

60. Consider the following statements about Mission Sudarshan Chakra of India:

1. It aims to enhance India's air defence, ballistic missile defence and aerial offensive capabilities.
2. This Mission is being designed to enhance rapid, precise, and powerful defence responses, reinforcing India's strategic autonomy.
3. One of the aims of this Mission is to cover all public places of India by an expanded nationwide security shield by 2035.

Which of the statements given above is/are correct?

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

**Answer: (a)**

**Explanation:**

- Announced by PM Modi from the Red Fort on 15 August 2025 (Independence Day), Mission Sudarshan Chakra is an indigenous AI-enabled networked national defence shield.
- Statement 1 CORRECT: It aims to enhance India's AIR DEFENCE + BALLISTIC MISSILE DEFENCE + AERIAL OFFENSIVE capabilities (hybrid shield-and-sword architecture).
- Statement 2 CORRECT: Designed to enable RAPID, PRECISE, and POWERFUL defence responses, reinforcing India's strategic autonomy (against ballistic missiles, hypersonics, fighter aircraft, swarm drones, loitering munitions).
- Statement 3 CORRECT: One of the stated goals is to create a complete national security shield by 2035, covering all civilian/strategic assets including public places in India.
- All three statements correct → option (a) 1, 2 and 3.

**Source:** PMO and PIB press releases on PM's Independence Day Speech 15 August 2025; MoD Annual Report 2025–26; IDSA MP-IDSA Issue Brief on Mission Sudarshan Chakra

**Page / Chapter reference:** *PIB Speech Text of PM's Independence Day Address 15 Aug 2025; MoD Annual Report 2025-26 Ch. on Strategic Defence Programmes; MP-IDSA Issue Brief 2025*  
**URL:** <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2152486>

61. Consider the following statements about river bridges connecting India with neighbouring countries:

1. 'Maitri Setu', built over Feni river, connects Ramgarh in India with Sabroom in Bangladesh.
2. Jhulaghat suspension bridge connects India with Myanmar.
3. Mechi bridge and its approaches connect Panitanki Bypass in India with Kakarvitta in Nepal.

Which of the statements given above is/are correct?

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

**Answer: D**

**Explanation:**

**Statement 1** — **Incorrect** Maitri Setu is built over the **Feni River** and connects: **Sabroom (Tripura, India) with Ramgarh (Bangladesh)**

**Statement 2** — **Incorrect:** Jhulaghat Suspension Bridge connects **India and Nepal**, not Myanmar.

**Statement 3** — **Correct** Mechi Bridge connects: Panitanki Bypass in India With Kakarvitta in Nepal.

**AUTHORITATIVE SOURCES**

- PMIndia — Mechi Bridge MoU — [https://www.pmindia.gov.in/en/news\\_updates/cabinet-approves-mou-between-india-and-nepal-for-laying-down-implementation-arrangement-for-construction-of-a-new-bridge-over-mechi-river/](https://www.pmindia.gov.in/en/news_updates/cabinet-approves-mou-between-india-and-nepal-for-laying-down-implementation-arrangement-for-construction-of-a-new-bridge-over-mechi-river/)
- Pithoragarh NIC — Jhulaghat — <https://pithoragarh.nic.in/tourist-place/jhulaghat>
- Wikipedia — Maitri Setu — [https://en.wikipedia.org/wiki/Maitri\\_Setu](https://en.wikipedia.org/wiki/Maitri_Setu)

62. Which of the following statements about a Zero First Information Report (Zero FIR) under the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023 is/are correct?

1. A Zero FIR can be lodged at a police station, even though the place of commission of a cognizable/non-cognizable offence is outside the territorial jurisdiction of that police station.
2. The Officer-in-Charge of the police station where a Zero FIR has been lodged may, with the permission of the competent authority, initiate a preliminary enquiry.
3. Under Zero FIR, it is obligatory for the informant to furnish information electronically.

Select the answer using the code given below:

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

**Answer: (c)**

**Explanation:**

BNSS Section 173(1) (replacing CrPC Sec. 154) provides for the registration of FIR including Zero FIR — at any police station **IRRESPECTIVE** of the territorial jurisdiction of the place of offence. After registration the FIR is **TRANSFERRED** to the police station having jurisdiction.

**Statement 1 CORRECT:** A Zero FIR **CAN** be lodged at any police station even if the place of commission of a cognizable offence is **OUTSIDE** its territorial jurisdiction (BNSS §173). The question also mentions 'cognizable/non-cognizable' — non-cognizable offences technically require a Magistrate's order under BNSS §174 — but the Zero FIR provision is primarily for cognizable. Reading broadly: Stmt 1 is essentially **CORRECT**.

**Statement 2 INCORRECT:** A Zero FIR is **REGISTERED** first and then **TRANSFERRED**. The OIC of the receiving station does **NOT** initiate preliminary enquiry — the enquiry is for the jurisdictional station. BNSS Sec. 173(3) permits preliminary inquiry only in some categories of cognizable offences, but not as a function of Zero FIR per se.

**Statement 3 INCORRECT:** There is NO mandatory electronic-only filing for the informant under Zero FIR — physical filing is also permitted; e-FIR is an OPTION under BNSS Sec. 173(1) but not obligatory.

· Only Stmt 1 → option (c).

**Source:** Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023 — Sec. 173; PRS Legislative Research analysis; MHA Notifications on BNSS rollout

**Page / Chapter reference:** *BNSS 2023 Bare Act, Sec. 173 (FIR registration including Zero FIR); PRS Brief on BNSS, Aug 2023*

**URL:** <https://prsindia.org/billtrack/the-bharatiya-nagarik-suraksha-sanhita-2023>

63. With reference to the organisations under the Government of India, consider the following details :

Sl. No.	Organisation	Function	Controlling Union Ministry
1.	Central Economic Intelligence Bureau (CEIB)	To coordinate between various law enforcement agencies	Ministry of Home Affairs
2.	Serious Fraud Investigation Office (SFIO)	To investigate complex corporate frauds	Ministry of Finance
3.	Central Bureau of Investigation (CBI)	To preserve values in public life and ensure the health of the national economy	Ministry of Personnel, Public Grievances and Pension

In how many of the above rows are the given details correctly matched ?

- (a) 1
- (b) 2
- (c) 3
- (d) None

**Answer: A**

**Explanation:**

• **Pair I INCORRECT:** CEIB functions under the Department of Revenue, Ministry of FINANCE (NOT Ministry of Home Affairs).

- **Pair II INCORRECT:** SFIO functions under the Ministry of CORPORATE AFFAIRS (NOT Ministry of Finance).
- **Pair III CORRECT:** CBI functions under the Department of Personnel & Training (DoPT), Ministry of Personnel, Public Grievances & Pensions — and its broader mandate matches.
- However the question framing in the image lists only one cleanly-matched row. Most analyst keys flag (c) '1' as best fit — but per current Allocation of Business, III is the safest correct pairing; ambiguous because of stem wording.

64. Which of the following international conventions **have not been** ratified by India?

1. Employment Policy Convention
  2. Abolition of Forced Labour Convention
  3. International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
  4. Geneva Convention Relative to the Protection of Civilian Persons in Time of War
  5. Convention on Reduction of Statelessness
- Select the answer using the code given below:
- (a) 2 and 4
  - (b) 1 and 2
  - (c) 3 and 4 only
  - (d) 3, 4 and 5**

**Answer: D**

1. Employment Policy Convention (ILO Convention No. 122)  
**India ratified this International Labour Organization (ILO) convention in 1998.**
2. Abolition of Forced Labour Convention (ILO Convention No. 105)  
**Ratified by India, India ratified this convention in 2000.**
3. India has neither signed **nor ratified** this UN convention.
4. Geneva Convention Relative to the Protection of Civilian Persons in Time of War. **Not ratified by India**
5. Convention on Reduction of Statelessness. India is not a party to the 1961 Convention on the Reduction of Statelessness. **So not ratified by India**

**AUTHORITATIVE SOURCES**

- **ILO NORMLEX — India ratifications —**  
[https://normlex.ilo.org/dyn/nrmlx\\_en/f?p=NORMLEXPUB:11200:0::NO::p11200\\_country\\_id:102691](https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB:11200:0::NO::p11200_country_id:102691)
- **ICRC — GC IV State Parties —** <https://ihl-databases.icrc.org/en/ihl-treaties/gciv-1949/state-parties>
- **UN Treaty Collection — Statelessness Convention —** <https://treaties.un.org>
- **PIB — ILO India —** <https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=168889>

65. Consider the following statements with respect to the AI Impact Summit, 2026 held in New Delhi:

1. The Summit's intellectual framework was based on three foundational Sutras: People, Planning, and Progress.
  2. The Preamble of the Summit stresses Democratising AI Resources, which acknowledges the Charter for Democratic Diffusion of AI as a binding framework to support locally relevant innovation and strengthen resilient AI ecosystems while respecting national laws.
  3. The New Delhi Declaration on AI Impact was structured around seven Chakras (Pillars), which included Access for Social Empowerment, AI for Science, and Secure and Trusted AI.
- Which of the statements given above is/are correct?
- (a) 1, 2 and 3
  - (b) 1 and 2 only
  - (c) 2 and 3 only
  - (d) 3 only

**Answer: D**

**Statement 1 is incorrect:** The AI Impact Summit 2026 was based on the three Sutras: People, Planet, Progress, **Not “Planning.”**

**Statement 2 is incorrect:** The New Delhi Declaration discussed “Democratising AI Resources,” but there was no reference to any “Charter for Democratic Diffusion of AI” as a binding framework.

**Statement 3 is correct:** The New Delhi Declaration on AI Impact was structured around seven Chakras (Pillars), which included Access for Social Empowerment, AI for Science, and Secure and Trusted AI.

**Source:** [https://www.pib.gov.in/PressReleasePage.aspx?PRID=2231208&utm\\_source=chatgpt.com&eg=3&lang=2](https://www.pib.gov.in/PressReleasePage.aspx?PRID=2231208&utm_source=chatgpt.com&eg=3&lang=2)

66. Which of the following connectivity projects is/are a part of cooperation between India and the ASEAN member countries?

1. Kaladan Multi-Modal Transit Transport Project
2. IMT Trilateral Highway
3. Agartala-Akhaura Rail Line

Select the answer using the code given below:

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

**Answer: A**

**Statement 1 is correct:** Kaladan Multi-Modal Transit Transport Project is a connectivity project between India and Myanmar (an ASEAN member).

**Statement 2 is correct:** India-Myanmar-Thailand Trilateral Highway connects:

- India
- Myanmar
- Thailand

**Statement 3 is incorrect:** Agartala-Akhaura Rail Link is a bilateral India–Bangladesh project.

**URL:** <https://www.mea.gov.in/aseanindia/index.html>

67. Match List I with List II and select the answer using the code given below the Lists:

List I (Project Supported by India)      List II (Country)

- |   |                |
|---|----------------|
| A. Mangdechhu Hydroelectric Project           | 1. Maldives    |
| B. Restoration of Stor Palace                 | 2. Afghanistan |
| C. District Hospital at Dickoya               | 3. Bhutan      |
| D. Institute of Security and Law Enf. Studies | 4. Sri Lanka   |

Code: A B C D

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

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

**solution & explanation**

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

A. Mangdechhu Hydroelectric Project → Bhutan (3): The 720 MW Mangdechhu HEP on the Mangdechhu River in Bhutan's Trongsa Dzongkhag was developed under India-Bhutan bilateral hydropower cooperation (THPA framework). PM Modi inaugurated it in 2019. India finances Bhutan's hydropower projects under grant and loan arrangements.

B. Restoration of Stor Palace → Afghanistan (2): Stor Palace (Storey Palace) in Kabul was a historic royal palace. India's Archaeological Survey of India (ASI) undertook its restoration as a flagship India-Afghanistan cultural cooperation project. It was one of India's most visible development assistance contributions to Afghanistan.

C. District Hospital at Dickoya → Sri Lanka (4): Dickoya is an estate/plantation town in the Nuwara Eliya district of Sri Lanka. India supported construction of a District Hospital here for the Tamil-origin plantation community, as part of India-Sri Lanka people-centric development assistance targeting historically marginalised estate Tamils.

D. Institute of Security and Law Enforcement Studies → Maldives (1): ISLES is a security and police training institute in Addu City, Maldives, built with Indian grant assistance. India supported its establishment to strengthen Maldivian internal security institutional capacity.

**AUTHORITATIVE SOURCES**

- MEA — India-Bhutan Relations — [https://www.mea.gov.in/Portal/ForeignRelation/Bhutan\\_January\\_2019.pdf](https://www.mea.gov.in/Portal/ForeignRelation/Bhutan_January_2019.pdf)
- MEA — India-Maldives Relations — [https://www.mea.gov.in/Portal/ForeignRelation/Maldives\\_Oct\\_2019.pdf](https://www.mea.gov.in/Portal/ForeignRelation/Maldives_Oct_2019.pdf)
- MEA — India-Afghanistan — <https://www.mea.gov.in>

68. Which of the following items of defence hardware is/are manufactured in India?

1. Su-30 MKI Fighter Jets
2. T-90 MK-III Tanks
3. Akula Class Submarine

Select the answer using the code given below:

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

**Correct Answer: (b) 1 and 2**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** Su-30 MKI Fighter Jets are manufactured in India by **Hindustan Aeronautics Limited (HAL)** at Nasik under a licensed production agreement with Russia's Sukhoi. This is well established — India has manufactured over 270 Su-30 MKIs domestically.

**Statement 2 — CORRECT:** T-90 MK-III Tanks: These advanced Main Battle Tanks (MBTs) are built under a licensing agreement with Russia at the Heavy Vehicles Factory in Avadi, Chennai, operated by Armoured Vehicles Nigam Limited (AVNL).

**Statement 2 — INCORRECT:** Akula Class Submarine: These are nuclear-powered attack submarines. Rather than manufacturing them, the Indian Navy has opted to lease these vessels directly from Russia

**Source:**

<https://www.janes.com/osint-insights/defence-news/hal-completes-licensed-production-of-final-two-of-222-su-30mki-fighters-for-iaf>

<https://www.thedefensenews.com/AVNL-Delivers-1000th-T-90IM-Tank-to-Indian-Army/>

<https://shop.ssbcrack.com/blogs/blog/india-to-receive-upgraded-akula-class-submarine-from-russia-by-2028-equipped-with-advanced-kalibr-missiles>

69. Consider the following statements about platforms for multilateral co-operation:

1. The 'Colombo Process' is a regional consultative process in which member states take binding decisions by consensus.
2. The 'Abu Dhabi Dialogue' is a voluntary non-binding consultative process among Asian countries of labour origin and destination to facilitate regional cooperation on contractual labour mobility.
3. The 'Global Forum for Migration and Development', created upon the proposal of a former UN Secretary General, is a voluntary forum whose decisions are non-binding in nature.

Which of the statements given above is/are correct?

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

**Answer: C**

**Explanation:**

**Statement 1 is incorrect:**Colombo Process is a regional consultative process among Asian labour-sending countries.However:It is **voluntary and non-binding**.Decisions are not binding by consensus.

**Statement 2 is correct:**Abu Dhabi Dialogue is a **voluntary and Non-binding consultative process** among Asian countries of labour origin and destination.

**Statement 3 is correct:**Global Forum on Migration and Development was created following the initiative of former UN Secretary-General Kofi Annan.It is:Voluntary,Informal,Non-binding.

**AUTHORITATIVE SOURCES**

- ILO — Colombo Process — <https://www.ilo.org/asia/areas/labour-migration/colombo-process/lang--en/index.htm>
- Abu Dhabi Dialogue — <https://abudhabidialogue.org.ae/>
- GFMD — Background — <https://www.gfmd.org/gfmd-background>

70. Consider the following UN organisations/agencies:

1. World Food Programme
2. United Nations Children's Fund
3. United Nations High Commissioner for Refugees
4. International Labour Organisation

How many of the above has/have been awarded the Nobel Prize twice?

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

**Answer: A**

**Explanation:**

1. World Food Programme (WFP):Awarded Nobel Peace Prize:2020(**Once**)
2. United Nations Children's Fund (UNICEF)Awarded Nobel Peace Prize:1965(**Once**)
3. United Nations High Commissioner for Refugees (UNHCR):Awarded Nobel Peace Prize **twice**:1954,1981
- 4.International Labour Organisation (ILO):**once** (1969)

**AUTHORITATIVE SOURCES**

- Nobel Prize — UNHCR 1954 — <https://www.nobelprize.org/prizes/peace/1954/unhcr/facts/>
- Nobel Prize — UNHCR 1981 — <https://www.nobelprize.org/prizes/peace/1981/unhcr/facts/>
- UNHCR History — <https://www.unhcr.org/history-of-unhcr.html>

71. Match List I with List II and select the answer using the code given below the Lists:

List I (UN Peacekeeping Operation) List II (Period of Operation)

- |             |              |
|-------------|--------------|
| A. UNMIL    | 1. 2007-2010 |
| B. MINURCAT | 2. 2002-2005 |
| C. MINUSTAH | 3. 2003-2018 |
| D. UNMISSET | 4. 2004-2017 |

Code: A B C D

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

**ANSWER: (b) A-3, B-1, C-4, D-2**

**SOLUTION & EXPLANATION**

**CORRECT ANSWER:** (b) A-3, B-1, C-4, D-2

A. UNMIL (UN Mission in Liberia) → 2003–2018 (3): Established by UNSC Resolution 1509 (September 2003) to support the ceasefire and peace process in Liberia. Formally closed March 2018 after successfully supporting Liberia's democratic consolidation.

B. MINURCAT (UN Mission in CAR and Chad) → 2007–2010 (1): Established September 2007 to protect civilians and promote human rights in eastern Chad and northeastern CAR, especially refugees. Mandate concluded December 2010.

C. MINUSTAH (UN Stabilisation Mission in Haiti) → 2004–2017 (4): Established June 2004 following President Aristide's removal. Operated through the 2010 earthquake and Haiti's rebuilding process. Replaced by MINUJUSTH in October 2017.

D. UNMISSET (UN Mission of Support in East Timor) → 2002–2005 (2): Succeeded UNTAET following East Timor's independence on 20 May 2002. Provided transitional support for administration, law enforcement, and security. Completed May 2005.

**AUTHORITATIVE SOURCES**

- UN Peacekeeping — Past Missions — <https://peacekeeping.un.org/en/past-missions>
- UN DPO — UNMIL — <https://unmissions.org/unmil>
- UN DPO — MINUSTAH — <https://minustah.unmissions.org/>

72. Match List I with List II and select the answer using the code given below the Lists:

List I (BIMSTEC Centre/Establishment)                      List II (Location)

- |  |              |
|--|--------------|
| A. BIMSTEC Cultural Industries Observatory | 1. NOIDA     |
| B. BIMSTEC Energy Centre                   | 2. Bengaluru |
| C. BIMSTEC Centre for Weather and Climate  | 3. Colombo   |
| D. BIMSTEC Technology Transfer Facility    | 4. Thimphu   |

Code: A B C D

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

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

**solution & explanation**

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

A. BIMSTEC Cultural Industries Observatory → Thimphu, Bhutan (4): The BCIO is hosted by Bhutan and based in Thimphu. Per the BIMSTEC official website and BBS (Bhutan Broadcasting Service), the Second BCIC Meeting in March 2025 confirmed operationalisation of the Cultural Industries Office in Thimphu. Bhutan leads cultural cooperation since the 2006 Paro Initiative.

B. BIMSTEC Energy Centre → Bengaluru, India (2): The BEC is located within the CPRI (Central Power Research Institute) campus, Sadashivnagar, Bengaluru 560080. Formally inaugurated at the 6th BIMSTEC Summit in Bangkok (April 2025). BIMSTEC official website and BIMSTEC Energy Centre website confirm this.

C. BIMSTEC Centre for Weather and Climate → NOIDA, India (1): The BCWC is located within the National Centre for Medium Range Weather Forecasting (NCMRWF), Noida, Uttar Pradesh. The Host Country Agreement was signed August 2023. NCMRWF's own website and BIMSTEC official page confirm Noida as the location.

D. BIMSTEC Technology Transfer Facility → Colombo, Sri Lanka (3): The MoA was signed at the 5th BIMSTEC Summit in Colombo on 30 March 2022. Nepal's MoFA and PTI confirmed the TTF will be established in Sri Lanka (Colombo). Entry into force is awaited.

**AUTHORITATIVE SOURCES**

- BIMSTEC — BEC — <https://bimstecenergycentre.org/about/>
- BIMSTEC — BCWC — <https://bimstec.org/bimstec-centre-for-weather-and-climate>
- PIB/The Print — TTF Colombo — <https://theprint.in/india/cabinet-approves-moa-for-establishment-of-bimstec-technology-transfer-centre-in-colombo/996548/>
- BBS — BCIO Thimphu — <https://www.bbs.bt/225802/>

73. Which one of the following pairs of Indian Army Corps and their Headquarters is NOT correctly matched?

- (a) 3 Corps : Dimapur  
 (b) 4 Corps : Tezpur

- (c) 14 Corps : Leh  
(d) 33 Corps : Srinagar

**answer: (d) 33 corps : srinagar**

**solution & explanation**

33 Corps (Trishakti Corps) is headquartered at SUKNA, near Siliguri, Darjeeling district, West Bengal — NOT at Srinagar.

Srinagar is the headquarters of 15 Corps (Chinar Corps), which is responsible for the Kashmir Valley under Northern Command.

Verification of the correctly matched pairs:

- (a) 3 Corps (Red Eagle Corps) → Dimapur, Nagaland: CORRECT. Responsible for Nagaland sector.  
(b) 4 Corps (Lightning Corps) → Tezpur, Assam: CORRECT. Responsible for Arunachal Pradesh border.  
(c) 14 Corps (Fire and Fury Corps) → Leh, Ladakh: CORRECT. Responsible for the entire LAC with China in Ladakh.  
(d) 33 Corps → Sukna (Siliguri, West Bengal), NOT Srinagar. This is the incorrectly matched pair. The Trishakti Corps guards the Siliguri Corridor and the LAC in the Sikkim-Arunachal sectors.

**AUTHORITATIVE SOURCES**

- Tribune India — 33 Corps Sukna — <https://www.tribuneindia.com/news/nation/rajnath-reviews-lac-situation-in-eastern-sector-at-armys-trishakti-corps-in-sukna-160549/>
- The Quint — 33 Corps — <https://www.thequint.com/news/india/sukna-based-troops-close-to-india-china-border>
- Wikipedia — XV Corps India (Srinagar/Chinar Corps) — [https://en.wikipedia.org/wiki/XV\\_Corps\\_\(India\)](https://en.wikipedia.org/wiki/XV_Corps_(India))

74. Which of the following statements with respect to the Revamped Rashtriya Gram Swaraj Abhiyan (RGSA) is/are correct?

1. The period of its implementation is 1st April, 2021 to 31st March, 2026.
2. The key objective of the Revamped RGSA is to develop the governance capabilities of the Panchayati Raj Institutions to deliver on the Sustainable Development Goals.
3. The share of the Central funding for the Revamped RGSA is 100% for all States and Union Territories.

Select the answer using the code given below:

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

**ANSWER: (b) 2 only**

**SOLUTION & EXPLANATION**

CORRECT ANSWER: (b) 2 only

Statement 1 — INCORRECT. The Revamped RGSA implementation period is FY 2022-23 to FY 2025-26 (1 April 2022 to 31 March 2026). The Cabinet approved the scheme in 2022 — NOT from April 2021. Claiming the start date as April 2021 is factually wrong.

Statement 2 — CORRECT. The core objective of the Revamped RGSA is to develop governance capabilities of Panchayati Raj Institutions (PRIs) and Rural Local Bodies (RLBs) to achieve the nine themes of Localisation of Sustainable Development Goals (LSDGs). This is explicitly stated in the Ministry of Panchayati Raj guidelines.

Statement 3 — INCORRECT. The Central funding share is NOT 100% uniform. For General/Other States: Centre:State = 60:40. For NE States, Himalayan States, and J&K: Centre:State = 90:10. For UTs without legislature: 100% central funding. The claim of 100% for all states and UTs is wrong.

**AUTHORITATIVE SOURCES**

- Ministry of Panchayati Raj — RGSA — <https://www.panchayat.gov.in/en/rashtriya-gram-swaraj-abhiyan/>
- PIB — RGSA — <https://pib.gov.in/PressReleasePage.aspx?PRID=1820905>

75. Which of the following countries are members of the European Union?

1. Belarus
2. Poland
3. Germany
4. Switzerland

Select the answer using the code given below:

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

**answer: (c) 2 and 3**

**solution & explanation**

correct answer: (c) 2 and 3

Poland (2) — EU MEMBER since 1 May 2004. Poland joined in the historic 'Big Bang' eastern enlargement that added 10 countries simultaneously. It is both an EU member and NATO ally.

Germany (3) — EU FOUNDING MEMBER. West Germany was one of the six original signatories of the Treaty of Rome (1957), which created the European Economic Community (EEC), the forerunner to the EU. Germany remains a core EU member.

Belarus (1) — NOT EU MEMBER. Belarus has not joined the EU and is subject to EU sanctions following the fraudulent 2020 elections and the Lukashenko regime's human rights abuses. Belarus has no active EU accession process.

Switzerland (4) — NOT EU MEMBER. Switzerland voted against joining the European Economic Area in 1992 and has never applied for EU membership. It has a network of bilateral sectoral agreements with the EU but deliberately remains outside the political/economic union.

**AUTHORITATIVE SOURCES**

- European Union — Member Countries — [https://european-union.europa.eu/principles-countries-history/country-profiles\\_en](https://european-union.europa.eu/principles-countries-history/country-profiles_en)
- European Commission — Enlargements — [https://ec.europa.eu/neighbourhood-enlargement/enlargement/past-enlargements\\_en](https://ec.europa.eu/neighbourhood-enlargement/enlargement/past-enlargements_en)

76. Match List I with List II and select the answer using the code given below the Lists:

List I (INTERPOL Notice) List II (Description)

- |                  |  |
|------------------|--|
| A. Silver Notice | 1. To seek information on unidentified bodies  |
| B. Blue Notice   | 2. To collect additional information about a person's identity, location, or activities in relation to a criminal investigation                |
| C. Black Notice  | 3. To provide additional warning about a person's criminal activities, where the person is considered to be a possible threat to public safety |
| D. Green Notice  | 4. To identify and trace criminal assets   |

Code: A B C D

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

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

**solution & explanation**

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

A. Silver Notice → To identify and trace criminal assets (4): INTERPOL piloted the Silver Notice in February 2023 and expanded it. Its specific purpose is to gather information about assets linked to criminals — real estate, bank accounts, investments — making it INTERPOL's dedicated financial crime/asset tracing tool.

B. Blue Notice → To collect additional information about a person's identity, location, or activities in relation to a criminal investigation (2): Blue Notices request information to identify, locate, or gather

details about a person of interest in a criminal investigation. Widely used for transnational crime and terrorism cases.

C. Black Notice → To seek information on unidentified bodies (1): Black Notices are published to help identify unknown human remains — providing physical descriptions, forensic data, and contextual information found with unidentified bodies.

D. Green Notice → To warn about a person's criminal activities where considered a possible threat to public safety (3): Green Notices alert police about repeat offenders with criminal convictions who are likely to reoffend in other countries.

**AUTHORITATIVE SOURCES**

- INTERPOL — Notices — <https://www.interpol.int/How-we-work/Notices/About-Notices>
- INTERPOL — Silver Notice — <https://www.interpol.int/How-we-work/Notices/Silver-Notice>

77. Which of the following statements in relation to NIRANTAR (National Institute for Research and Application of Natural Resources to Transform, Adapt and Build Resilience), a platform of institutions under the Ministry of Environment, Forest and Climate Change, is/are correct?

1. Ecosystem Survey and Analysis is a vertical under this platform, the lead institute of which is Botanical Survey of India, Kolkata.
2. Research and Management of Ecosystem Service is a vertical under this platform, the lead institute of which is Central Zoo Authority, New Delhi.
3. Capacity Development Support is a vertical under this platform, the lead institute of which is Indian Institute of Forest Management, Bhopal.

Select the answer using the code given below:

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

**ANSWER: (b) 1 and 3 only**

**SOLUTION & EXPLANATION**

CORRECT ANSWER: (b) 1 and 3 only

NIRANTAR was established by MoEFCC to integrate research capabilities of its subordinate and autonomous institutions through four thematic verticals, without creating new entities.

Statement 1 — CORRECT. The Botanical Survey of India (BSI), headquartered in Kolkata since 1890, is the lead institute for the Ecosystem Survey and Analysis vertical. BSI is India's premier body for botanical surveys, plant taxonomy, and ecosystem-level flora documentation — a natural fit for leading the survey and analysis of India's ecosystems.

Statement 2 — INCORRECT. The Central Zoo Authority (CZA) is a regulatory body overseeing zoo management and captive wildlife standards in India — its mandate does not extend to research on ecosystem services per se. The Research and Management of Ecosystem Service vertical is led by the Wildlife Institute of India (WII), Dehradun, which conducts broad ecological, ecosystem services, and wildlife research across India's landscapes.

Statement 3 — CORRECT. The Indian Institute of Forest Management (IIFM), Bhopal, is confirmed as the lead institute for the Capacity Development Support vertical. IIFM is India's premier management institute specialising in forestry, environment, and natural resources — making it the ideal institution for human capacity building in this sector.

**AUTHORITATIVE SOURCES**

- NIRANTAR Official Portal — <https://nirantar.moef.gov.in/>
- PIB — NIRANTAR Meeting January 2026 — <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2213829&reg=3&lang=1>
- GK247 — NIRANTAR Capacity Development IIFM — <https://www.thegk247.com/nirantar-platform/>

78. The Chancellor of the Federal Republic of Germany visited India in January, 2026. Which of the following is/are **NOT** correct in terms of outcomes of this visit?

1. Signing of a Memorandum of Understanding between the All India Institute of Ayurveda and the University of Hamburg.
2. Signing of a Memorandum of Understanding on Youth Hockey Development between Hockey India and the German Hockey Federation
3. Establishment of a bilateral dialogue mechanism on the Indo-Pacific
4. Opening of an Honorary Consul of Germany in Lucknow

Select the answer using the code given below:

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

**answer: (b) 1 and 4**

**solution & explanation**

correct answer: (b) 1 and 4

German Chancellor Friedrich Merz visited India on 12–13 January 2026 (Ahmedabad and Bengaluru). Per the official Outcomes List on PMIndia.gov.in (19 Agreements/MoUs):

Statement 1 — NOT CORRECT. The MoU on traditional medicines was signed between the All India Institute of Ayurveda and CHARITE UNIVERSITY, Berlin — NOT the University of Hamburg. Item 7 of the official outcomes list explicitly names 'Charité University, Germany.' The statement introduces a wrong university name.

Statement 2 — CORRECT. The MoU on Youth Hockey Development between Hockey India and the German Hockey Federation is Item 19 of the official outcomes list. Fully confirmed as an actual outcome.

Statement 3 — CORRECT. India and Germany established a 'New Bilateral Indo-Pacific consultation mechanism.' This is confirmed in the India-Germany Joint Statement, AffairsCloud summary, and StudyIQ analysis as an official announcement/outcome of the visit.

Statement 4 — NOT CORRECT. Germany opened an Honorary Consulate in AHMEDABAD — not Lucknow. AffairsCloud confirms: 'Germany opened an Honorary Consulate in Ahmedabad.' The statement uses Lucknow, which is wrong.

**AUTHORITATIVE SOURCES**

- PMIndia — Official Outcomes List — [https://www.pmindia.gov.in/en/news\\_updates/list-of-outcomes-visit-of-the-chancellor-of-the-federal-republic-of-germany-to-india-january-12-13-2026/](https://www.pmindia.gov.in/en/news_updates/list-of-outcomes-visit-of-the-chancellor-of-the-federal-republic-of-germany-to-india-january-12-13-2026/)
- India-Germany Joint Statement — [https://www.pmindia.gov.in/en/news\\_updates/india-germany-joint-statement/](https://www.pmindia.gov.in/en/news_updates/india-germany-joint-statement/)
- AffairsCloud — <https://affairsccloud.com/overview-of-german-chancellor-friedrich-merzs-visit-to-india-from-january-12-to-13-2026/>

79. Which of the following statements about DHRUV64 is/are correct?

1. It is the third chip fabricated under the DIR-V Programme with an overall aim to enable the creation of microprocessors for India.
2. It is India's first homegrown 1.0 GHz, 64-bit dual-core microprocessor.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Correct Answer: (c) Both 1 and 2**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** DHRUV64 is the third **chip** fabricated under the **DIR-V Programme** (not the third). The DIR-V Programme is India's initiative to develop RISC-V based indigenous microprocessors.

**Statement 2 — CORRECT:** DHRUV64 is indeed India's first homegrown **1.0 GHz, 64-bit dual-core microprocessor**, developed under the DIR-V programme. It represents a significant milestone in India's semiconductor self-reliance journey under the broader **Semicon India** initiative.

**Source:**

<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=156505&ModuleId=3&reg=3&lang=1>

80. The Bureau of Indian Standard (BIS) recently introduced a national standard to test and assess bomb disposal system. Which of the following statements with regard to this system is/are correct?

1. The new standard is known as IS 19445 : 2025.
2. It will improve interoperability of equipment across agencies.
3. It was developed by TBRL, DRDO in collaboration with the 30th Central Scientific Research Institute, Russia.

Select the answer using the code given below:

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

**Correct Answer: (c) 1 and 2 only**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** The Bureau of Indian Standards (BIS) introduced the national standard **IS 19445:2025** specifically for testing and assessing bomb disposal systems. This is a recent development aimed at standardizing EOD (Explosive Ordnance Disposal) equipment across agencies in India.

**Statement 2 — CORRECT:** One of the key objectives of introducing this standard is to improve **interoperability of equipment across various agencies** — including defence, paramilitary, and state police forces — ensuring that bomb disposal equipment meets uniform standards and can work seamlessly across organizations.

**Statement 3 — INCORRECT:** The standard was developed by **BIS in collaboration with Indian defence establishments**, specifically **TBRL (Terminal Ballistics Research Laboratory), DRDO**. However, the mention of "**30th Central Scientific Research Institute, Russia**" makes this statement incorrect. This is an Indian standard developed for Indian requirements — there is no confirmed Russian collaboration in its development.

**Source:**

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2209191&reg=3&lang=2>

81. X, born in the UK, was conferred the Nobel Prize in 2025. He was a professor in an American university when this prize was announced. Identify X:

- (a) Michel H. Devoret
- (b) Richard Robson
- (c) John Clarke
- (d) Joel Mokyr

**answer: (c) john clarke**

**solution & explanation**

correct answer: (c) john clarke

John Clarke (born 1942 in Cambridge, United Kingdom) is an emeritus professor of physics at the University of California, Berkeley (an American public research university). He shared the 2025 Nobel Prize in Physics with Michel H. Devoret and John M. Martinis 'for the discovery of macroscopic quantum mechanical tunnelling and energy quantisation in an electric circuit' — foundational work for modern quantum computing.

Why the other options fail:

- Michel H. Devoret (a): Born in France (NOT UK). Professor at Yale, USA — American university. Does not match UK birth criterion.
- Richard Robson (b): Born in Glusburn, UK (UK birth MATCHES), won the 2025 Nobel in Chemistry, but is a professor at the University of Melbourne, AUSTRALIA — NOT an American university. Fails the American university criterion.

• Joel Mokyr (d): Economist at Northwestern University, USA (American university), but born in the Netherlands — NOT UK. Fails the UK birth criterion.

Only John Clarke satisfies BOTH conditions: born in the UK AND professor at an American university (UC Berkeley).

**AUTHORITATIVE SOURCES**

- Berkeley News — <https://news.berkeley.edu/2025/10/07/john-clarke-uc-berkeley-emeritus-professor-awarded-2025-nobel-prize-in-physics/>
- Britannica — 2025 Nobel Winners — <https://www.britannica.com/topic/2025-Nobel-Prize-Winners>
- Nobel Prize — Physics 2025 — <https://www.nobelprize.org/prizes/physics/2025/>

82. Which of the following statements with regard to the Grand Slam Tennis Tournaments is/are correct?

1. The tournaments have a shared governance structure establishing the partnership among the four Grand Slam tournaments.
2. They are open for entry to all internationally ranked tennis players above the age of 14.
3. There is a limitation on the number of Wild Cards a player may receive to compete in a Grand Slam Tournament.

Select the answer using the code given below:

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

**answer: (c) 1 only**

**solution & explanation**

correct answer: (c) 1 only

Statement 1 — CORRECT. The four Grand Slams (Australian Open, Roland-Garros, Wimbledon, US Open) coordinate through the Grand Slam Board (GSB), which includes representatives from all four tournaments and the ITF. This shared governance structure sets common frameworks for prize money, player conduct, and rules. Statement 1 correctly identifies this.

Statement 2 — INCORRECT on two counts: First, Grand Slams are NOT open to all ranked players — entry is based on ATP/WTA ranking thresholds (approximately top 100-104 direct acceptance), with remaining spots filled via qualifying draws. Second, the age requirement is a minimum of 14 years — not 'above 14' (which would mean 15+). Players aged exactly 14 may participate under ITF's professional entry rules with restrictions.

Statement 3 — INCORRECT. There is NO ITF or Grand Slam rule capping the total number of Wild Cards a single player may receive across all Grand Slams in a career or season. Each individual Grand Slam allocates around 8 Wild Cards per gender per event, but no regulation restricts how many Slams a given player may receive Wild Cards from. Players like Serena Williams, Andy Murray have received multiple Wild Cards from multiple Slams without any such rule.

**AUTHORITATIVE SOURCES**

- Grand Slam Board — <https://www.grandslam.itf.tennis/>
- ITF — Player Regulations — <https://www.itftennis.com/en/>
- Wimbledon — Wild Cards — <https://www.wimbledon.com/>

83. Which one of the following pairs of semiconductor plants in India and their locations is NOT correctly matched?

- (a) CG Power and Industrial Solutions Pvt. Ltd. in partnership with Renesas Electronics and STARS Microelectronics : Gujarat
- (b) Tata Semiconductor Assembly and Test Pvt. Ltd. : Assam
- (c) HCL-Foxconn Joint Venture India Chip Ltd. : Madhya Pradesh
- (d) SicSem Pvt. Ltd. : Odisha

**ANSWER: (c) HCL-Foxconn Joint Venture India Chip Ltd. : Madhya Pradesh**

**SOLUTION & EXPLANATION**

**CORRECT ANSWER:** (c) — HCL-Foxconn : Madhya Pradesh is NOT correctly matched. The HCL-Foxconn Joint Venture's semiconductor facility was approved for Jewar, UTTAR PRADESH (in the vicinity of the Noida International Greenfield Airport development zone) — NOT Madhya Pradesh. This was approved under the India Semiconductor Mission (ISM).

Verification of the correctly matched pairs:

(a) CG Power + Renesas Electronics + STARS Microelectronics → Gujarat (Sanand): CORRECT. This consortium's OSAT facility was approved for Sanand, Gujarat under the first wave of India Semiconductor Mission approvals in 2024.

(b) Tata Semiconductor Assembly and Test Pvt. Ltd. → Assam (Morigaon): CORRECT. Tata Electronics' OSAT (Outsourced Semiconductor Assembly and Test) facility is in Morigaon, Assam. (Tata Electronics also has a separate chip fab in Dholera, Gujarat.)

(d) SicSem Pvt. Ltd. → Odisha: CORRECT. SicSem's Silicon Carbide (SiC) semiconductor facility was approved for Odisha under the ISM scheme.

**AUTHORITATIVE SOURCES**

- India Semiconductor Mission — <https://semiconductors.india.gov.in/>
- PIB — Semiconductor approvals — <https://pib.gov.in/>
- Economic Times — Semiconductor news — <https://economictimes.indiatimes.com/>

84. Which of the following statements with regard to India's indigenous new high resolution weather model, the Bharat Forecast System, is/are correct?

1. Its objective is to generate forecasts at the Panchayats cluster level.
2. It was developed by IIT Delhi.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**ANSWER:** (a) 1 only

**SOLUTION & EXPLANATION**

**CORRECT ANSWER:** (a) 1 only

Statement 1 — CORRECT. BharatFS (Bharat Forecast System) was developed with the explicit objective of generating forecasts at the cluster of panchayats/villages level. It operates on a 6 km x 6 km grid — approximately the spatial scale of a panchayat cluster. The PIB (Ministry of Earth Sciences Parliamentary Q&A) states verbatim: 'The BharatFS was developed with the objective of generating forecasts at the cluster of panchayats level and improving the prediction of extremes.'

Statement 2 — INCORRECT. BharatFS was developed by the Indian Institute of Tropical Meteorology (IITM), Pune — under the Ministry of Earth Sciences — with support from NCMRWF, Noida and the India Meteorological Department (IMD). IIT Delhi had NO role in its development. The system runs on supercomputers Arka (IITM Pune, 11.77 PetaFLOPS) and Arunika (NCMRWF Noida, 8.24 PetaFLOPS), reducing forecast runtime from 12 hours to 3–6 hours.

**AUTHORITATIVE SOURCES**

- PIB — BharatFS Parliament Q&A — <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2153585>
- DD News — BharatFS — <https://ddnews.gov.in/en/bharat-forecast-system-boosts-extreme-rainfall-prediction-accuracy-by-30-jitendra-singh/>
- Ministry of Earth Sciences — <https://www.moes.gov.in/>

85. Consider the following statements with regard to the film Boong:

1. The film has recently won the British Academy of Film and Television Arts (BAFTA) Award in the Children's and Family Film category.
2. The film is directed by Lakshmipriya Devi.
3. This is the first Indian film to win a BAFTA award in the Children's and Family Film category.

Which of the statements given above is/are correct?

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

**answer: (a) 1, 2 and 3**

**solution & explanation**

correct answer: (a) 1, 2 and 3

All three statements are correct, confirmed by multiple authoritative news sources.

Statement 1 — CORRECT. 'Boong' won the BAFTA for Best Children's and Family Film at the 79th British Academy Film Awards, held on 22 February 2026 at London's Royal Festival Hall. Boong beat Disney's Lilo & Stitch, Zootopia 2, and the French sci-fi film Arco.

Statement 2 — CORRECT. The film is directed by Lakshmipriya Devi, a debut feature filmmaker from Manipur who spent two decades working in the Hindi film industry before making this Manipuri-language coming-of-age drama.

Statement 3 — CORRECT. Boong made history as the first Indian film ever to win a BAFTA in the Children's and Family Film category. Multiple sources including ANI, The New Indian Express, Wikipedia, and The Daily Star confirm this historic first.

**AUTHORITATIVE SOURCES**

- The Daily Star — <https://www.thedailystar.net/entertainment/news/boong-director-lakshmipriya-devi-spotlights-manipur-unrest-bafta-4112971>
- Newsonair — <https://www.newsonair.gov.in/manipuri-film-boong-wins-bafta-award-for-best-childrens-family-film-in-london>
- Wikipedia — Lakshmipriya Devi — [https://en.wikipedia.org/wiki/Lakshmipriya\\_Devi](https://en.wikipedia.org/wiki/Lakshmipriya_Devi)

86. Which of the following statements regarding the features of blockchain technology are correct?

1. Records stored in the database may be made visible to relevant stakeholders without risk of alteration.
2. Copies of the entire database are stored on multiple computers on a network, syncing within seconds.
3. Consortium blockchain is a blend of public and private blockchains allowing selective data access.
4. Mathematical algorithms make it impossible to change or delete any data once recorded and accepted.

Select the answer using the code given below:

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

**Correct Answer: (c) 1, 2 and 4**

**Statement-wise analysis:**

**Statement 1 — CORRECT:** Blockchain allows **selective transparency** — records can be made visible to relevant stakeholders without risk of alteration, depending on the type of blockchain (public/private/consortium). The immutability of records is a core feature of blockchain.

**Statement 2 — CORRECT:** This describes the **distributed ledger** nature of blockchain — copies of the entire database (ledger) are stored across multiple nodes/computers on the network, syncing rapidly. This decentralization is fundamental to blockchain's architecture.

Statement 3 — INCORRECT: Hybrid Blockchain: It is a blend of public and private blockchains allowing selective data access.

**Statement 4 — CORRECT:** Mathematical algorithms (cryptographic hash functions) make it practically **impossible to change or delete data** once recorded and accepted on the blockchain — this is the immutability property.

**Source:**

[https://www.niti.gov.in/sites/default/files/2020-01/Blockchain\\_The\\_India\\_Strategy\\_Part\\_I.pdf](https://www.niti.gov.in/sites/default/files/2020-01/Blockchain_The_India_Strategy_Part_I.pdf)  
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2182023&reg=3&lang=2>

87. An e-commerce revenue model where the seller has control over pricing but doesn't keep products in stock and instead transfers customer orders and shipment details to a third-party supplier, who then ships the goods directly to the customer, is called:

Revenue Model

- (a) Dropshipping Model
- (b) Affiliate Revenue Model
- (c) Transaction Fee Revenue Model
- (d) Agency

**Answer- A**

**Source:** <https://www.forbes.com/advisor/business/what-is-dropshipping-everything-you-need-to-know/>

**Explanation-**

**(a) Dropshipping Model [CORRECT]:** Dropshipping is an e-commerce fulfillment method where a store doesn't keep the products it sells in stock. Instead, the seller acts as a storefront, markets the products, and retains **complete control over retail pricing** (earning a profit on the margin between the wholesale cost and their listed price). When a customer buys an item, the seller purchases it from a third-party supplier, who then handles inventory management and ships the product directly to the end consumer.

**(b) Affiliate Revenue Model [INCORRECT]:** In an affiliate model, a publisher or influencer redirects potential buyers to a merchant's website using a unique referral link. If the user purchases the product, the affiliate earns a fixed commission. Crucially, the affiliate **has zero control over product pricing**, does not process payments, and does not handle or transfer customer shipping data.

**(c) Transaction Fee Revenue Model [INCORRECT]:** This model is used by platform operators or marketplaces (such as eBay, PayPal, or specialized aggregators) that charge a flat fee or a percentage of the total transaction value to facilitate a commercial exchange between external buyers and sellers. The platform itself does not own the inventory or dictate individual retail prices.

**(d) Agency Revenue Model [INCORRECT]:** In this setup, a firm acts as a broker or agent connecting service providers with clients (common in advertising, real estate, and digital services). While they may negotiate contracts, it does not describe the specific inventory-less retail product supply chain transaction detailed in the question.

88. Which one of the following correctly represents the three key sub-indices of the Financial Inclusion Index (FI-Index) of the Reserve Bank of India (RBI)?

- (a) Credit access, Insurance depth, and Pension coverage
- (b) Banking access, GDP contribution, and Financial literacy
- (c) Access, Usage, and Quality
- (d) Access, Affordability, and Transparency

**Answer- C**

**Source:** <https://en.vikaspedia.in/viewcontent/financial-education/financial-inclusion/financial-inclusion-index>

**Explanation-**

**(c) Access, Usage, and Quality [CORRECT]:** The Reserve Bank of India (RBI) constructs and publishes the comprehensive **Financial Inclusion Index (FI-Index)** annually to capture the extent of financial inclusion across the country. The index is built specifically upon **three mathematical sub-indices**, each carrying a predefined weight:

1. **Access (35% weight):** Measures parameters like the availability of banking outlets, ATMs, and non-bank touchpoints per lakh adults.
2. **Usage (45% weight):** Assesses the active utilization of financial services, monitoring credit deposit ratios, active insurance policies, transactions per account, and remittances.
3. **Quality (20% weight):** Reflects the qualitative aspect of financial services, capturing financial literacy, consumer protection frameworks, and grievance redressal mechanisms.

- (a) **Credit access, Insurance depth, and Pension coverage [INCORRECT]:** These are specific thematic areas or indicators measured *under* the broader "Usage" and "Access" dimensions, but they do not constitute the three macro sub-indices of the mathematical model.
- (b) **Banking access, GDP contribution, and Financial literacy [INCORRECT]:** GDP contribution is an indicator of macro-economic growth, not financial inclusion. Financial literacy is counted under the "Quality" umbrella, not as a standalone sub-index.
- (d) **Access, Affordability, and Transparency [INCORRECT]:** While affordability and transparency are crucial regulatory pillars of a safe banking ecosystem, they are not the structural sub-indices designated by the RBI for calculating the FI-Index.

89. Which one of the following best describes the key objective of India's 'Open Network for Digital Commerce' (ONDC) initiative?

- (a) To allow government control over all digital commerce transactions
- (b) To replace private e-commerce players
- (c) To break the dominance of large e-commerce platforms by enabling interoperability across networks
- (d) To mandate UPI-based payments for all online transactions

**Answer- C**

**Explanation-**

(c) **To break the dominance of large e-commerce platforms [CORRECT]:** The Open Network for Digital Commerce (ONDC) is a landmark initiative established by the **Department for Promotion of Industry and Internal Trade (DPIIT)** under the Ministry of Commerce and Industry. Its primary objective is to democratize the Indian e-commerce landscape by shifting it from a **platform-centric model** (where giant tech monopolies like Amazon and Flipkart control the entire value chain from onboarding sellers to final delivery) to an **open-network model**. ONDC enables open protocols and seamless interoperability, meaning any seller on any ONDC-compliant platform can be discovered and purchased from by a buyer using any ONDC-compliant buyer app (such as Paytm, Pincode, or Mystore).

(a) **To allow government control over all digital commerce transactions [INCORRECT]:** ONDC is set up as a private non-profit (Section 8) company, not a government regulatory body meant to exercise central state control over private market transactions. It functions purely as an unbundled infrastructure provider, much like the Open Credit Enablement Network (OCEN) or UPI.

(b) **To replace private e-commerce players [INCORRECT]:** ONDC does not seek to launch its own retail storefront or replace existing players. Instead, it invites private entities, startups, logistics providers, and local mom-and-pop stores (*Kirana* shops) to integrate into a unified ecosystem, widening the playing field for small businesses.

(d) **To mandate UPI-based payments for all online transactions [INCORRECT]:** While ONDC is frequently referred to as the "UPI of e-commerce" because it shares a similar open, decentralized philosophy, it does not mandate any single payment mode. It supports multiple diverse payment gateways and digital payment methods chosen by the transacting parties.

**Sources:** <https://www.dpiit.gov.in/static/uploads/2025/08/2676a59359f4467f0a457658d4635215.pdf>

90. Which one of the following statements about Unified Payments Interface (UPI) and Central Bank Digital Currency (Digital Rupee) is **not** correct?

- (a) UPI is a real-time payment system but Digital Rupee is akin to sovereign paper currency.
- (b) In case of UPI, settlement for end users happens instantly as the money gets immediately debited or credited but in case of Digital Rupee, there is no settlement as the wallet balance gets transferred to another wallet.
- (c) UPI transactions are recorded by banks and reflected in bank statements but in case of Digital Rupee, no data is captured in bank statements as transactions are from one wallet to another.
- (d) In both the cases (UPI and Digital Rupee), the liability lies with the users and their respective banks.

**Answer: D**

**Explanation-**

(a) **[STATEMENT IS CORRECT]:** UPI is a digital service layer (an overlay system) that facilitates instant, real-time transfers of funds between commercial bank accounts. On the other hand, the Digital Rupee ( $\text{\text{₹}}$ ) is India's Central Bank Digital Currency (CBDC). It is not an account-to-account transfer system; it is a digital token that represents legal tender, making it identical in nature to sovereign physical paper currency issued by the central bank.

(b) **[STATEMENT IS CORRECT]:** In UPI, money moves between two different commercial banks, requiring an underlying inter-bank settlement process handled by the clearinghouse. For the Digital Rupee, when you pass a digital token from your wallet to someone else's wallet, the transfer of the token is the final settlement itself. No inter-bank settlement or clearing is required because the asset itself has shifted, exactly like handing over a physical ₹500 note.

(c) **[STATEMENT IS CORRECT]:** Every single UPI transaction directly hits your savings or current bank account, meaning it is recorded by your bank's core banking solution and appears on your standard bank statement/passbook. Digital Rupee transactions happen entirely within an isolated digital wallet ecosystem. Because it does not draw from or deposit into your commercial bank balance during a peer-to-peer transaction, these transfers leave no footprint on your regular bank account statement.

(d) **[STATEMENT IS INCORRECT / TARGET ANSWER]:** This is the false statement. For UPI, the underlying funds are commercial bank deposits, meaning the financial liability rests with that specific commercial bank. However, for the Digital Rupee ( $\text{\text{₹}}$ ), the currency is a **direct liability of the Reserve Bank of India (RBI)**. If you hold Digital Rupees, you hold a claim against the sovereign state itself, completely bypassing commercial bank failure risks.

**Source-** <https://www.rbi.org.in/commonman/english/Scripts/FAQs.aspx?Id=3686>

91. Which of the following statements about Real-World Assets (RWA) Tokenization are correct?

1. Tokenization is the process of turning real world assets into digital tokens using blockchain technology.
2. Tokenization of real world assets offers  $24 \times 7$  access, promoting financial inclusion.
3. Tokenization of real world assets will allow the access to high growth investment opportunities for individuals in India.

Select the answer using the code given below:

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

**Answer-** A

**Svource:** <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-us/technical/accountinglink/documents/ey-29607-261us-01-26-2026.pdf>

**Explanation-**

**Statement 1 is CORRECT:** Asset tokenization is fundamentally the process of converting the ownership rights of a physical or financial real-world asset (such as real estate, gold, bonds, or fine art) into digital tokens. This transformation relies on **distributed ledger technology (DLT) or blockchain**, which records transaction history immutably and uses smart contracts to automate operational rules.

**Statement 2 is CORRECT:** Unlike traditional financial markets that are bound by strict geographic limitations, broker intermediaries, and standard banking hours, blockchain infrastructure operates continuously. Tokenization offers  **$24 \times 7$  access** to asset markets, enables fractional ownership (dividing a high-value asset into micro-shares), reduces transaction costs, and eliminates high entry barriers. This directly democratizes capital markets and **promotes broader financial inclusion**.

**Statement 3 is CORRECT:** In India, high-growth asset classes like premium commercial real estate, grade-A infrastructure, and diverse international commodities have traditionally required massive ticket sizes, keeping them restricted to High-Net-Worth Individuals (HNIs) and institutional investors. RWA tokenization bridges this gap, allowing individual retail investors in India to buy micro-shares of high-growth properties or yield-generating instruments for small fractions of their total cost. The

regulatory traction behind this shift is reflected in **SEBI's Small and Medium REITs (SM REITs) framework** and the **International Financial Services Centres Authority (IFSCA)** frameworks at GIFT City.

92. A bond whose proceeds are used only to finance or refinance a combination of both environmental and social projects is called:

- (a) Green Bond
- (b) Social Bond
- (c) Sustainability Bond
- (d) Sovereign Bond

**Answer- C**

**Source:** [https://www.oecd.org/en/publications/sustainable-bonds\\_26726c68-en/full-report/component-5.html](https://www.oecd.org/en/publications/sustainable-bonds_26726c68-en/full-report/component-5.html)

**(c) Sustainability Bond [CORRECT]:** According to the International Capital Market Association (ICMA) guidelines—which are adopted globally and by regulators like SEBI—**Sustainability Bonds** are specifically defined as debt instruments whose proceeds are exclusively applied to finance or refinance a combination of **both Green (environmental) and Social projects**. They bring the objectives of both green and social frameworks under a single bond issuance.

**(a) Green Bond [INCORRECT]:** The proceeds of a Green Bond are strictly ring-fenced to finance projects that offer clear **environmental benefits** only. These include renewable energy, energy efficiency, clean transportation, sustainable water management, and climate change adaptation. They do not fund distinct social welfare projects.

**(b) Social Bond [INCORRECT]:** The proceeds of a Social Bond are directed exclusively toward projects that aim to achieve positive **social outcomes** for targeted populations. Examples include affordable housing, food security, access to essential services (healthcare, education), and job creation. They do not explicitly target environmental or climate outcomes.

**(d) Sovereign Bond [INCORRECT]:** A Sovereign Bond is simply a debt security issued by a national government to finance generic state expenditure, denominated in either foreign or domestic currency. While a government *can* issue a "Sovereign Green Bond" or "Sovereign Sustainability Bond," a standard sovereign bond is not inherently restricted to environmental or social projects.

93. Which of the following statements about M1xchange's role in Micro, Small & Medium Enterprises (MSMEs) financing is/are correct?

- 1. M1xchange provides collateral based loans to MSMEs.
- 2. M1xchange facilitates discounting of invoices and Bills of Exchange for MSMEs.
- 3. M1xchange functions as a credit rating agency for MSMEs.

Select the answer using the code given below:

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

**Answer- B**

**Source:** <https://www.m1xchange.com/faqs/>

**Explanation-**

**Statement 1 is INCORRECT:** M1xchange does not extend traditional commercial or collateral-based loans to businesses. Instead, it operates entirely on a **collateral-free** model. The financing is backed purely by the unpaid invoices raised by MSMEs against their corporate buyers, meaning small businesses do not need to pledge any physical assets or land to unlock capital.

**Statement 2 is CORRECT:** M1xchange is one of the primary digital platforms licensed by the Reserve Bank of India (RBI) under the **TReDS (Trade Receivables Discounting System)** framework. Its core functionality is to facilitate the online discounting of trade receivables, specifically **invoices and Bills of Exchange**, raised by MSME sellers. This allows MSMEs to upload

their invoices, have them electronically accepted by buyers, and auction them to multiple financiers (banks/NBFCs) to get paid instantly at competitive interest rates.

**Statement 3 is INCORRECT:** M1xchange is an electronic auction marketplace and trading platform for trade receivables; it **does not function as a credit rating agency**. Credit rating agencies for MSMEs include entities like CRISIL, ICRA, CARE, or SMERA. While financiers on the M1xchange platform evaluate the creditworthiness of the *corporate buyer* before bidding on an invoice, M1xchange itself does not issue credit ratings.

94. Which one of the following best describes the 'Crowding Out Effect' in the context of fiscal policy?

- (a) A situation where private investment increases due to increased Government spending
- (b) A situation where Government borrowing leads to higher interest rates, which reduces private investment
- (c) A situation where an increase in taxes leads to increased private sector investment
- (d) A situation where Government spending has no impact on aggregate demand

**Answer: B**

**Source-** <https://www.investopedia.com/terms/c/crowdingouteffect.asp>

**Explanation:**

**"A situation where Government borrowing leads to higher interest rates, which reduces private investment" [CORRECT]:** This is the textbook definition of the **Crowding Out Effect**. When a government aggressively increases its fiscal deficit and borrows heavily from the domestic financial market, it drastically increases the total demand for loanable funds. This surge in demand pushes up the market interest rates (yields on bonds). As borrowing becomes significantly more expensive, private corporations find it unviable to take loans for new projects, effectively "crowding out" private capital investment.

**"A situation where private investment increases due to increased Government spending" [INCORRECT]:** This describes the opposite phenomenon, known as the **"Crowding In Effect."** This typically occurs during a recession when targeted government capital expenditure on infrastructure creates jobs, boosts consumer demand, and builds business confidence, thereby encouraging private companies to invest alongside the government.

**"A situation where an increase in taxes leads to increased private sector investment" [INCORRECT]:** This statement is economically flawed. An increase in corporate or personal income taxes generally reduces the disposable income of households and the retained earnings of firms, which typically diminishes, rather than expands, private sector investment capacity.

**"A situation where Government spending has no impact on aggregate demand" [INCORRECT]:** This concept leans more toward the extreme classical economic view or the theory of **Ricardian Equivalence** (the idea that consumers anticipate future taxes to pay off current debt and save all extra government handouts, resulting in zero net change in aggregate demand). It does not represent the mechanism of crowding out.

95. Which of the following statements about Rare Earth Elements (REEs) and Critical Minerals is/are correct?

1. Modern technological innovations including Artificial Intelligence, robotics and space exploration extensively utilise Rare Earth Elements (REEs).
2. China has the highest share in mining of REEs followed by India.
3. The Government of India launched the National Critical Mineral Mission (NCMM) in 2025 to establish a robust framework for self-reliance in the critical mineral sector.
4. Rare Earth Elements are a set of 13 metallic elements.

Select the answer using the code given below:

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

**answer: (a) 1 and 3 only**

**solution & explanation**

Statement 1 — CORRECT. REEs (particularly neodymium, dysprosium, praseodymium, and others) are critical components in AI hardware (GPU permanent magnets), robotics (precision motors), electric vehicles, wind turbines, smartphones, and spacecraft systems (reaction wheels, optical instruments). They are central to all modern advanced technology sectors.

Statement 2 — INCORRECT. China does hold the highest global share in REE mining (~60–70%). However, the second-largest producer is NOT India — it is typically the United States, Myanmar, or Australia (depending on the year and USGS data). India has significant REE deposits (especially in monazite-bearing beach sands) but is nowhere near second globally in production volumes. This statement is factually wrong.

Statement 3 — CORRECT. India launched the National Critical Mineral Mission (NCMM) on 29 January 2025, with a total outlay of Rs 34,300 crore over seven years (2024-25 to 2030-31). The mission's purpose is explicitly to establish a robust framework for self-reliance in critical minerals — covering exploration, mining, processing, recycling, and overseas acquisition. Confirmed by PIB, VIF, and MoM sources.

Statement 4 — INCORRECT. REEs consist of 17 metallic elements: the 15 lanthanides (La to Lu in the periodic table) plus Scandium (Sc) and Yttrium (Y), which share similar chemical properties. The claim of 13 elements is wrong.

**AUTHORITATIVE SOURCES**

- PIB — NCMM — <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2120525&reg=3&lang=2>
- VIF — NCMM Analysis — <https://www.vifindia.org/article/2025/february/13/National-Critical-Mineral-Mission>
- KGS Live — REE 17 elements — <https://www.kgs.live/current-affairs/daily-current-affairs/posts/national-critical-mineral-mission>

96. Which of the following statements about insurance in aviation sector is/are correct?

1. 'Aviation Hull Insurance' covers the physical aircraft, including the body, engine, and on-board equipment.
2. Under the Montreal Convention, adopted in 1999 by over 130 countries, including India, airlines are strictly liable to pay compensation to the family/nominee of every deceased passenger without requiring the family to prove fault.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: C**

**Explanation:**

- **Statement 1 is correct:** Aviation Hull Insurance is a specialized policy that protects aircraft owners against physical damage or total loss of the aircraft. It covers the entire physical structure, including the fuselage (body), wings, engines, permanently installed avionics, and onboard equipment.

**Statement 2 is correct:** Under the Montreal Convention 1999 (MC99), air carriers operate under a two-tier liability system. For passenger injury or death, the convention establishes strict liability up to a specific limit (currently set at 128,821 Special Drawing Rights per passenger). This means the family or nominee of a deceased passenger does not need to prove fault or negligence on the part of the airline to receive this compensation. India is a signatory to this convention

Source:

<https://www.moneycontrol.com/news/business/unpacking-insurance-claims-for-the-air-india-plane-crash-who-pays-what-and-how-13144650.html>

[https://content.sbigeneral.in/uploads/AVIATION\\_and\\_HULL\\_PACKAGE\\_POLICY\\_Wording\\_b3de868ec0.pdf](https://content.sbigeneral.in/uploads/AVIATION_and_HULL_PACKAGE_POLICY_Wording_b3de868ec0.pdf)

<https://www.iata.org/en/programs/passenger/mc99/>

97. Which of the following statements about Crowdfunding is/are correct?

1. Crowdfunding is solicitation of funds (small amount) from multiple investors through a web-based platform or social networking site for a specific project.
2. Small and Medium Enterprises (SMEs) are able to raise funds at lower cost of capital without undergoing rigorous procedures.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer- C**

**Source:** [https://www.sebi.gov.in/sebi\\_data/attachdocs/1403005615257.pdf](https://www.sebi.gov.in/sebi_data/attachdocs/1403005615257.pdf)

**Explanation:**

- **Statement 1 is correct:** Crowdfunding is solicitation of funds (small amount) from multiple investors through a web-based platform or social networking site for a specific project, business venture or social cause.
- **Statement 2 is correct:** SMEs are able to raise funds at lower cost of capital without undergoing through rigorous procedures in this mode

98. With reference to different Committees in India, consider the following details:

Sno	Sl. No. Committee	Objective	Organization under which it was formed
1	R.N. Malhotra Committee	Comprehensive reforms of Insurance sector in India	Insurance Regulatory and Development Authority of India
2	L.C. Gupta Committee	Preparing a roadmap for the introduction of derivatives trading in India	Securities and Exchange Board of India
3	Urjit R. Patel Committee	Preparing a roadmap for reforming bank lending to the Housing sector	Reserve Bank of India
4	Y.H. Malegam Committee	Preparing a roadmap for reforms in Microfinance sector in India	Reserve Bank of India

In which of the above rows are all the details correctly matched?

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

**Answer: D**

**Explanation-**

**Row 1 is INCORRECT:** While the R.N. Malhotra Committee (1993) was indeed responsible for recommending comprehensive reforms to the insurance sector (including opening it up to private and foreign players), it was **not** formed under the IRDAI. In fact, it was set up by the **Government of**

**India.** The committee's recommendations actually *led to the creation* of the Insurance Regulatory and Development Authority (IRDA) later via an Act in 1999. It could not have been formed under an organization that did not exist yet.

**Row 2 is CORRECT:** The **L.C. Gupta Committee** on Derivatives was set up by the **Securities and Exchange Board of India (SEBI)** in November 1996. Its mandate was to draft a comprehensive regulatory framework and roadmap for introducing financial derivatives trading in India, which it submitted in 1998.

**Row 3 is INCORRECT:** The **Urjit R. Patel Committee** (2013) was indeed set up by the **Reserve Bank of India (RBI)**, but its objective was completely different. It was the *Expert Committee to Revise and Strengthen the Monetary Policy Framework*. Its recommendations revolutionized India's central banking by introducing the current Consumer Price Index (CPI)-based inflation targeting framework and the Monetary Policy Committee (MPC). It had nothing to do with bank lending to the housing sector.

**Row 4 is CORRECT:** The **Y.H. Malegam Committee** was constituted by the **Reserve Bank of India (RBI)** in October 2010 in the wake of the Andhra Pradesh microfinance crisis. Its objective was to study the issues, regulation, and dark sides (like usurious interest rates) of the Microfinance Institution (MFI) sector, which eventually led to a separate category of NBFC-MFIs.

**Source:**

[https://old.irdai.gov.in/ADMINCMS/cms/NormalData\\_Layout.aspx?page=PageNo4&mid=2](https://old.irdai.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo4&mid=2)

[https://www.sebi.gov.in/sebi\\_data/commondocs/ar97981\\_h.html](https://www.sebi.gov.in/sebi_data/commondocs/ar97981_h.html)

[https://rbidocs.rbi.org.in/rdocs/publicationreport/pdfs/ecomrf210114\\_f.pdf](https://rbidocs.rbi.org.in/rdocs/publicationreport/pdfs/ecomrf210114_f.pdf)

<https://rbidocs.rbi.org.in/rdocs/publicationreport/pdfs/yhmr190111.pdf>

99. Consider the following statements about the Non-Banking Financial Companies (NBFCs) in India:

1. NBFCs cannot accept demand deposits.
2. All the NBFCs operating in India have to be registered with the RBI.
3. NBFCs form part of the payment and settlement system and can issue cheque drawn on itself.
4. Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation (DICGC) is not available to the depositors of deposit taking NBFCs.

Which of the following statements given above is/are correct?

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

Answer: A

**Source:** <https://www.rbi.org.in/commonperson/english/scripts/FAQs.aspx?Id=1167>

**Explanation:**

Banks and NBFCs are different entities subject to different statutory and regulatory requirements. However, NBFCs lend and make investments and hence these activities are akin to that of banks. The major differences between banks and NBFCs are given below:

- NBFCs cannot accept demand deposits; **(Statement 1 is correct)**
- NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself; **(Statement 3 is incorrect)**
- Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation (DICGC) is not available to depositors of deposit taking NBFCs. **(Statement 4 is correct)**

**Statement 2 is incorrect:** Only those NBFCs that fulfil 50-50 criteria need to be registered with RBI. Financial activity as principal business is when a company's financial assets constitute more than 50 per cent of the total assets (netted off by intangible assets) and income from financial assets constitute more than 50 per cent of the gross income. **A company which fulfils both these criteria needs to get registered as NBFC with the Reserve Bank.**

100. Consider the following statements about Multidimensional Poverty Index (MPI) :

1. MPI is Calculated using Alkire-Foster methodology.

2. MPI calculated by NITI Aayog has a total of twelve indicators.
3. Maternal Health and Bank Account are common indicators in the MPI of NITI Aayog and MPI of United Nations Development Programme (UNDP).

Which of the statements are correct?

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

**Answer:** A

**Explanation-**

- **Statement 1 is correct:** It also retains the robust Alkire-Foster methodology developed by our technical partners, the Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP)
- **Statement 2 is correct:** Like the global MPI, India's national MPI has three equally weighted dimensions – Health, Education, and Standard of living – which are represented by 12 indicators
- **Statement 3 is incorrect:** Only NITI Aayog's and not UNDP have these two extra indicators, viz., Maternal Health and Bank Accounts in line with national priorities

**Source-** National Multidimensional Poverty Index: A Progress Review 2023 | United Nations Development Programme

