

DAILY MCQs COMPILATION
with
EXPLANATIONS

APRIL, 2026

NEXT IAS

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HISTORY, ART & CULTURE

1. Recently, a painting titled Yashoda and Krishna, was sold for ₹167.2 crore at an auction conducted by Saffronart, setting a record for Indian art. The artist is regarded as a pioneer of modern Indian art for introducing European academic realism into Indian themes. Who is the painter of this artwork?
(a) Nandalal Bose (b) Abanindranath Tagore
(c) Raja Ravi Varma (d) Amrita Sher-Gil
2. With reference to the Piprahwa relics, which of the following statements is/are correct?
 1. They were discovered in 1898 by William Claxton Peppé.
 2. They are believed to be associated with the mortal remains of Vardhamana Mahavira.Select the correct answer using the code given below:
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
3. He founded the Akhil Bharatiya Ravidas Mahasabha and the All India Depressed Classes League to mobilize marginalized communities.
The above statements refer to which of the following personalities?
(a) B. R. Ambedkar (b) Babu Jagjivan Ram
(c) Jyotirao Phule (d) Mahatma Gandhi
4. With reference to the Sabarimala Temple, which of the following statements is/are correct?
 1. It is located on the banks of the Pamba River within the Periyar Tiger Reserve.
 2. The temple symbolises celibacy of Lord Ayyappa.Select the correct answer using the code given below:
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
5. With reference to the Elephanta Caves, which of the following statements is/are correct?
 1. The caves are carved out of basalt rock of the Deccan Trap formation.
 2. The Chandela rulers of Central India are considered the main patrons of the caves during the 9th century CE.Select the correct answer using the code given below:
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
6. Which of the following organisations was founded by Vinayak Damodar Savarkar?
(a) Anushilan Samiti (b) Abhinav Bharat Society
(c) Ghadar Party (d) Hindustan Socialist Republican Association

7. Which of the following works were written by Jyotirao Phule?
1. Gulamgiri
 2. Shetkarayacha Aasud
 3. Hind Swaraj
 4. Tritiya Ratna

Select the correct answer using the code below:

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

8. With reference to Zoroastrianism, which of the following statements is/are correct?
1. It is one of the world's oldest monotheistic religions, founded by Zarathustra.
 2. It originated in ancient Persia around 1500–1000 BCE.

Select the correct answer using the code given below:

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

9. In 1938, he became Congress President at the Haripura session and advocated for swaraj as a national demand. He was the first to call Mahatma Gandhi the "father of the nation" during an address from the Azad Hind Radio from Singapore in July 1944.

Who among the following personalities described above ?

- (a) Jawaharlal Nehru (b) Subhas Chandra Bose
(c) Sardar Vallabhbhai Patel (d) Lala Lajpat Rai

10. With reference to Konyak Naga Tribe, which of the following statements is/are correct?
1. They inhabit only the Mon district of Nagaland.
 2. Their language belongs to the Indo-Aryan family.

Select the correct answer using the code given below:

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

11. He was an Indian socialist-turned-Congress leader and served as Prime Minister of India. He was strongly aligned with Jayaprakash Narayan during the anti-Emergency movement. During the Emergency (1975–77), he was imprisoned under Maintenance of Internal Security Act) MISA. He founded and edited Young Indian in 1969, which became influential for its political commentary.

Who among the following personalities described above ?

- (a) P. V. Narasimha Rao (b) Charan Singh
(c) Morarji Desai (d) Chandra Shekhar

12. The concept of Ishtalinga, associated with Jagadguru Basaveshwara, refers to:

- (a) Worship of nature spirits
(b) A ritual of fire sacrifice
(c) Personal and direct connection with the divine
(d) Worship through temple priests only

13. With reference to the First Battle of Panipat, consider the following statements:

1. It marked the end of the Delhi Sultanate and laid the foundation of the Mughal Empire in India.

2. Babur's victory was primarily due to the numerical superiority of his forces over Ibrahim Lodi.
3. The battle witnessed the effective use of field artillery and matchlocks in open warfare in India.
4. Babur employed the Tulughma tactic, involving flanking movements to encircle the enemy.

Which of the statements given above are correct?

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

14. The philosophical doctrine most associated with Adi Shankaracharya is:

- | | |
|---------------------|-------------------|
| (a) Vishishtadvaita | (b) Dvaita |
| (c) Advaita Vedanta | (d) Shuddhadvaita |

15. With reference to Thrissur Pooram, consider the following statements:

1. It is an annual Hindu temple festival held in Kerala.
2. It is celebrated during the months of October–November.

Which of the statements given above is/are correct?

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

16. Consider the following statements:

1. A World Heritage site can be classified as a natural or man-made that may require special protection.
2. World Heritage Day is an annual observance held on April 18th.

Which of the statements given above is/are correct?

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

17. Consider the following statements regarding the *Iron Age Megalithic Culture in India*:

1. Megaliths were primarily associated with burial practices and often contained grave goods.
2. Black-and-Red Ware pottery is commonly found in megalithic sites.
3. Menhirs refer to chambered burial structures made of multiple stone slabs.

Which of the statements given above is/are correct?

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

18. Consider the following statements regarding the Stone Age:

1. The Paleolithic Age is characterized by the use of microlithic tools and the beginning of domestication of animals.
2. The Mesolithic Age represents a transitional phase marked by environmental adaptations and development of specialized tools.

Which of the statements given above is/are correct?

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

19. With reference to the concept of Tathagata in Buddhism, consider the following statements:

1. The term Tathagata is used in Buddhist texts to denote a fully enlightened being who has transcended the cycle of birth and death.
2. In Mahayana traditions, Vairocana is placed in the eastern direction and represents mirror-like wisdom.
3. Amitabha is associated with the western direction and linked to the concept of the Pure Land (Sukhavati).
4. Each of the Five Tathagatas represents the transformation of specific human emotions into higher wisdom.

Which of the statements given above are correct?

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

20. Consider the following statements regarding the Piprahwa Relics:

1. They were discovered in the late 19th century from a stupa site identified with Kapilavastu.
2. The relics include caskets bearing inscriptions in Brahmi script linked to the Sakya clan.
3. The inscription on the relic casket is in Kharosthi script.

Which of the statements given above are correct?

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

EXPLANATIONS

1. (c)

Context

- The painting Yashoda and Krishna by Raja Ravi Varma was sold for ₹167.2 crore at an auction conducted by Saffronart, setting a record for Indian art.
 - The painting was created in the 1890s during the peak of Raja Ravi Varma's artistic career.

About Raja Ravi Varma

- Raja Ravi Varma (1848–1906) was born in **Kilimanoor, in present-day Kerala**.
- He is regarded as a **pioneer of modern Indian art** for introducing **European academic realism into Indian themes**.
- He worked under royal patronage, particularly of the **Travancore royal family**.

2. (a)

Context

- The sacred Piprahwa Relics are set to arrive in Leh on the occasion of **Buddha Purnima**.
 - The Relics were repatriated from Hong Kong in July 2025.

About Piprahwa relics

- The Piprahwa relics were discovered in **1898** by British civil engineer **William Claxton Peppé** in Piprahwa, Uttar Pradesh.
 - They are excavated from the **Piprahwa Stupa**—widely recognized as the ancient city of **Kapilavastu**, the birthplace of Lord Buddha.
- **They include** bone fragments, soapstone and crystal caskets, a sandstone coffer, and offerings such as gold ornaments and gemstones.
- They are believed to be associated with the mortal remains of Lord Buddha.
 - An inscription in the **Brahmi script** on one of the caskets confirms these as relics of the Buddha deposited by the **Sakya clan**.
- **Status:** Most of these relics were moved to the **Indian Museum in Kolkata in 1899** and are legally protected as **'AA' antiquities**, forbidding their sale or removal.
- While some bone relics were gifted to the **King of Siam, a portion kept by Peppé's descendants**.

3. (b)

Context: PM Modi paid tributes to **Babu Jagjivan Ram** on his birth anniversary.

About

- **Babu Jagjivan Ram** was a freedom fighter and social reformer born on **5 April 1908** in Chandwa village (present-day Bihar).
 - He studied at **Banaras Hindu University** and later graduated from **University of Calcutta**.
- **Role in Freedom Struggle:** He was inspired by Mahatma Gandhi and actively participated in the national movement.
 - He took part in the **Civil Disobedience Movement** and the **Quit India Movement**.
- **Social Justice Contributions:** He founded the **Akhil Bharatiya Ravidas Mahasabha** and the **All India Depressed Classes League** to mobilize marginalized communities.
 - He was instrumental in the enactment of the **Protection of Civil Rights Act, 1955**.
- **Political Career:** He was a member of the Constituent Assembly of India.
 - He was a **Cabinet Minister for 35 years**- the longest serving minister handling several key portfolios.
 - As Food & Agriculture Minister, he is credited with the **Green Revolution** and as Defence Minister he led India to the historic **1971 war**, which saw the birth of Bangladesh.
 - He served as the **Deputy Prime Minister** of India in **1979 under Morarji Desai**.

4. (c)

Context

- A nine-judge bench of the Supreme Court of India has begun hearings on petitions concerning women's entry into religious places, including the Sabarimala Temple.

About Sabarimala Temple

- **Location and Deity:** The Sabarimala Temple is located in the Pathanamthitta district of Kerala on the banks of the **sacred Pamba River (also known as Pampa)**, within the **Periyar Tiger Reserve in the Western Ghats**.
 - It is dedicated to **Lord Ayyappa**, also known as **Dharmashasta**.
 - The temple is situated on a **hilltop** at an elevation of about **1,260 metres**.
- **Religious Significance:** It is one of the largest annual pilgrimage centres in the world. Devotees undertake a rigorous **41-day 'Vratham' (penance)** before visiting.
 - The temple symbolises celibacy (**Naishtika Brahmacharya**) of **Lord Ayyappa**.

5. (a)

Context

- A major excavation by the Archaeological Survey of India (ASI) on **Elephanta Island** has revealed a 1,500-year-old stepped reservoir.

Elephanta Caves

- The **Elephanta Caves** are located on **Elephanta Island**, historically known as **Gharapuri**, meaning “city of caves.”
 - **Elephanta Island** is a **UNESCO World Heritage Site** situated in Mumbai Harbour.
- The name “**Elephanta**” was given by the **Portuguese in the 16th century** after they discovered a large stone elephant near the island, while the **original name Gharapuri** was used by local inhabitants.
- Historically, the island was associated with multiple dynasties.
 - The **Kalachuris of Mahishmati** are considered the main patrons of the caves during the 6th century CE, as supported by recent coin discoveries of **King Krishnaraja**. Before them, the Konkan Mauryas ruled the region, followed by the **Chalukyas and Rashtrakutas** who maintained its importance.
- There are seven caves, of which Cave 1 (Great Cave) is the most prominent. It houses the iconic 20-foot **Trimurti sculpture**.
 - A three-headed figure representing Shiva as Creator, Preserver, and Destroyer.



- The caves are carved out of **basalt rock of the Deccan Trap formation**.

6. (b)

Context

- A criminal defamation case involving remarks on Vinayak Damodar Savarkar has brought attention to the origin of the title Swatantryaveer, before a Pune court.

Vinayak Damodar Savarkar

- Vinayak Damodar Savarkar (1883–1966), popularly known as **Veer Savarkar**, was a prominent **freedom fighter, political thinker, and writer**.
 - He is associated with the development of the **Hindutva ideology** and played a significant role in revolutionary nationalism during the freedom struggle.
- **Education:** Savarkar studied at Fergusson College in Pune and later travelled to London to study law.
- **Role in freedom struggle:** He founded the **Abhinav Bharat Society in 1904**, a secret organisation dedicated to armed revolution against British rule.
 - **While in London**, he led the **India House and the Free India Society**, training Indian students in methods of sabotage and assassination.

- **Hindu Mahasabha:** He served as the president of the Hindu Mahasabha from 1937 to 1943, advocating for a “**Hindu Rashtra**” (**Hindu Nation**).
- **Social Reform:** Savarkar was a staunch opponent of the caste system and untouchability.
- **Literary Work:** He authored **The Indian War of Independence, 1857**, which was the first work to describe the 1857 rebellion as India’s first struggle for independence.

7. (a)

Context: Prime Minister Narendra Modi paid tributes to Mahatma Jyotirao Phule on his birth anniversary.

About: Jyotirao Phule

- **Birth:** On **11th April, 1827** in Khatgun village which is today in the Satara district of **Maharashtra**.
- **Title:** His family belonged to the ‘mali’ caste and their original title was ‘**Gorhay**’. On May 11, 1888, he was bestowed with the title of **Mahatma** by a Maharashtrian social activist Vithalrao Krishnaji Vandekar.
- **Ideology and influence:** His ideology centered around **liberty, egalitarianism, and socialism**. He drew inspiration from **Thomas Paine’s** book *The Rights of Man*.
- **Marriage:** He was married off when he was only 13 with **Savitribai**. The couple went on to establish the country’s **first school for girls** in Bhidewada, Pune, in 1848.
- **Balhatya Pratibandhak Griha:** In **1863**, Jyotirao and Savitribai began Balhatya Pratibandhak Griha, India’s first home dedicated to prohibiting infanticide and supporting pregnant Brahmin widows and rape victims.
- **Satyashodhak Samaj:** Phule along with his followers formed **Satyashodhak Samaj in 1873** which meant ‘Seekers of Truth’ and was dedicated towards the removal of the socio-economic backwardness of Dalits.
 - It is believed that it was Phule who **first used the term ‘Dalit’** for the depiction of oppressed masses often placed outside the ‘**varna system**’.
- **Literary works:** Gulamgiri (Slavery), Shetkarayacha Aasud (Cultivator’s Whipcord), and Tritiya Ratna.
- **Death:** 28 November 1890.

8. (c)

Context

- The decline of the gray wolf in Iran can be seen through the lens of its ancient Zoroastrian ethos as for them the wolf was an ‘evil animal’.

What is Zoroastrianism?

- Zoroastrianism is one of the **world’s oldest monotheistic religions**, founded by **Zarathustra (also known as Zoroaster)**.
- It originated in ancient **Persia (modern-day Iran)** around **1500–1000 BCE**.
- Centered on the worship of one supreme God, **Ahura Mazda (Wise Lord)**, it emphasizes a cosmic struggle between good and evil, promoting an ethical life based on “**Good Thoughts, Good Words, Good Deeds**”.
- **Holy Book:** The **Avesta**, which contains the **Gathas (hymns written by Zoroaster)**.
- **Worship & Purity:** Fire is a central symbol of purity and divine light, representing Ahura Mazda’s wisdom. Fire temples are used for worship.

9. (b)

Recently, it has been highlighted that Subhas Chandra Bose moved from idealism to a practical, balanced approach combining moral vision with effective action.

Contribution in Freedom struggle

- He left the civil service path to join the Indian National Congress and became known for his radical demand for complete independence.
- He was elected President of the Indian National Congress in 1938 at the **Haripura session**, where he advocated making swaraj a national demand and opposed British-controlled federation plans.
- In 1939, he was re-elected after defeating the Gandhi-backed candidate Dr. Pattabhi Sitaramayya, but soon faced internal opposition when he was unable to form a working committee.
- He formed the **Forward Bloc** to unite the more radical left-wing members within the Congress.

Ideological differences between Subhas Chandra Bose and Mahatma Gandhi

- Gandhi supported a gradual path to independence, while Bose demanded immediate and decisive action.
- Gandhi rejected materialism and modern technology, whereas Bose viewed technology and mass production as essential for India's progress and dignity.
- Gandhi favored a decentralized social order and was skeptical of the modern state, while Bose believed a strong centralized state was necessary to solve India's problems.
- Bose also rejected Gandhi's strict commitment to non-violence.
- Despite these differences, Bose respected Gandhi's importance and was the first to call him the "**father of the nation**" in a **1944** broadcast from Singapore on Azad Hind Radio.

10. (d)**Context**

- A recent study by Nagaland University has identified the anti-cancer potential of traditional herbal medicine used by the **Konyak Naga tribe**.

Konyak Naga Tribe

- Konyak Naga Tribe is one of the largest Naga tribes of Nagaland, inhabits mainly the **Mon district** of Nagaland.
 - They are also found in the **Tirap, Longding, and Changlang districts of Arunachal Pradesh**, parts of Assam, and in the Naga Self-Administered Zone of Myanmar.
- Konyaks were **historically known for the practice of headhunting**, which was linked to warrior status and prestige.
- **The traditional political system** is headed by hereditary chiefs known as **Anghs**.
- **Konyak language** belongs to the **Tibeto-Burman language family**.
- **The primary occupation** is **jhum (shifting cultivation)**.
- **Major festival: Aoleang Festival**, celebrated in April to mark the New Year and sowing season.

11. (d)

In News : The Prime Minister paid tribute to Chandra Shekhar on his birth anniversary, marking his 100th birth year.

- Chandra Shekhar was Known as a "Young Turk" leader for strong ideology, integrity, and opposition to monopoly power and vested interests.
 - He supported the politics of social change over personality-based politics.
 - He was Influenced by and closely associated with Jayaprakash Narayan during the 1970s opposition movement.

- **Journalism & writing:** he Founded and edited Young Indian (1969), a weekly publication. Wrote Meri Jail Diary and Dynamics of Social Change.
- **Emergency period (1975–77):** He was Arrested under (Maintenance of Internal Security Act) MISA during the Emergency despite being in the ruling party; Young Indian was shut down during this time.
- Chandra Shekhar served as Prime Minister of India from 10 November 1990 to 21 June 1991.

12. (c)

Context: Prime Minister Narendra Modi paid homage to Jagadguru Basaveshwara on the occasion of Basava Jayanthi.

About

- Basaveshwara, also known as **Basavanna**, was a **12th-century** philosopher, social reformer, and key figure of the **Bhakti movement**, primarily active in the Kalyana region of present-day Karnataka.
- He is regarded as the founder of **Lingayatism** and advocated equality, social justice, and the rejection of caste hierarchy and social discrimination.
- He served as a minister under **King Bijjala II** of the Kalachuri dynasty, and his teachings are preserved in poetic compositions known as **Vachanas**.
- Basaveshwara introduced the concept of **Ishtalinga**, promoting a direct and personal connection with the divine, transcending social divisions.
- He also established the **Anubhava Mantapa** (often referred to as the first Parliament of the world), a pioneering forum for open dialogue, where people from diverse backgrounds, including women, could participate in discussions on spiritual and social issues.

13. (a)

Statement 1 is correct: The First Battle of Panipat (April 21, 1526) resulted in the death of Ibrahim Lodi, the last Sultan of the Lodi Dynasty. This decisively ended the Delhi Sultanate and allowed Babur to occupy Delhi and Agra, marking the start of the Mughal Empire.

Statement 2 is not correct: Ibrahim Lodi had an army of roughly 100,000 men and nearly 1,000 elephants. Babur had a much smaller force, estimated between 12,000 to 15,000 men. Babur's victory was a triumph of superior military strategy and technology over sheer numbers.

Statement 3 is correct: This battle is historically significant for being one of the earliest instances of the use of gunpowder firearms and field artillery in the Indian subcontinent. Babur's artillery, commanded by Ustad Ali and Mustafa, devastated the Lodi ranks and panicked their elephants.

Statement 4 is correct: Babur employed the Tulughma (flanking) system, a Mongol-Turkic tactic.

- He divided his army into various units: Left, Right, and Center.
- The Tulughma parties were small, highly mobile cavalry units that circled around the enemy's flanks to attack from the rear, effectively trapping the Lodi army in a pincer movement.
- He also used the Araba (carts) system—tying 700 carts together with hide ropes to create a protective barrier for his cannons and musketeers.

14. (c)

About Adi Shankaracharya

- Adi Shankaracharya (approximately 788–820 CE) was a philosopher, theologian, and saint born in Kalady, Kerala.

- Shankaracharya's defining contribution to **Indian philosophy is Advaita Vedanta, the doctrine of non-dualism.**
 - He taught that **Atman (individual soul)** and **Brahman (universal consciousness)** are identical, not two separate entities. The world's apparent reality is **Maya (illusion)** which dissolves upon attaining **Jnana (true knowledge)**.
- He also introduced the **Shanmata system** organising worship of **six primary deities (Shiva, Vishnu, Shakti, Ganesha, Muruga, and Surya)** under a single philosophical umbrella presenting each as a valid path to Brahman and reducing sectarian conflict across Hindu traditions.
- Shankaracharya wrote authoritative Bhashyas (commentaries) on the Prasthanatrayi — the three foundational texts of Vedanta: **the Brahma Sutras, Bhagavad Gita, and 12 major Upanishads.**
- He composed over 72 devotional hymns including **Soundarya Lahari, Sivananda Lahari, and Nirvana Shatakam.**

15. (a)

Context

- The Thrissur Pooram this year will be held without fireworks and with a scaled-down 'kudamattam' ceremony following a fireworks unit explosion in Mundathikode that caused multiple deaths.

Thrissur Pooram

- **Location:** The Thrissur Pooram is an **annual Hindu temple festival** held in **Thrissur, Kerala.**
- **Timing:** Celebrated during the months of April-May.
- It was started by **Shakthan Thampuran, Maharaja of Kochi** and includes the participation of **10 different temples** from Paramakkavu, Thiruvambadi Kanimangalam, Karamucku, Laloor, Choorakottukara, Panamukkampally, Ayyanthole, Chembukkavu and Neythilakavu.

16. (c)

World Heritage Sites

- A World Heritage site is classified as **a natural or man-made area or a structure** that is of international importance, and a space **which requires special protection. Hence statement 1 is correct.**
- These sites are officially recognised by the UN and the United Nations Educational Scientific and Cultural Organisation (UNESCO).
- UNESCO believes that the sites classified as World Heritage are important for humanity, and they hold cultural and physical significance.

World Heritage Day

- **About:**
 - **World Heritage Day**, also known as the **International Day for Monuments and Sites**, is an annual observance held on April 18th. **Hence statement 2 is correct.**
 - It is celebrated **to raise awareness** about the importance of cultural heritage and **to celebrate the diversity** of our shared human history.
- **Theme:**
 - The World Heritage Day 2023 theme is "Heritage Changes".

17. (a)

In News: Recent excavations at a **megalithic site in Virli Khandar (Bhandara, Maharashtra)** have revealed **unique burial architecture, artefacts, and pottery patterns**, offering fresh insights

into ancient funerary practices in **Vidarbha** and understanding of the **Megalithic culture of Vidarbha (c. 1000 BCE–300 CE)**.

Statement 1 is correct

- Megaliths are primarily **burial monuments** and often contain **grave goods** like iron tools, pottery, beads, etc., indicating belief in the afterlife.

Statement 2 is correct

- **Black-and-Red Ware (BRW)** is a characteristic pottery associated with Iron Age megalithic sites.

Statement 3 is not correct

- **Menhir** is a **single upright stone**, but **Dolmen/Cist** is chambered burial structures made of multiple slabs.

18. (b)

Statement 1 is not correct: Paleolithic (Old Stone Age) is associated with crude stone tools and hunting-gathering, not microliths or domestication (these are Mesolithic features).

Statement 2 is correct: Mesolithic is a transitional phase with microlithic tools and adaptation to changing environments.

19. (a)

Statement 1 is correct: The term Tathagata is a significant title used for the Buddha, especially Gautama Buddha. It literally means “one who has thus come” or “thus gone,” indicating a being who has attained enlightenment and gone beyond the cycle of birth and death (samsara).

Statement 2 is not correct: In Mahayana and Vajrayana traditions, Vairocana is positioned at the center of the mandala, not in the east. He represents the Dharmadhatu (ultimate reality) wisdom, which is the source from which all other forms of wisdom emerge. The eastern direction is actually associated with Akshobhya, who symbolizes mirror-like wisdom.

Statement 3 is correct: Amitabha is placed in the western direction and is closely associated with the concept of the Pure Land (Sukhavati). This realm is believed to be a place where beings can be reborn and easily attain enlightenment through devotion.

Statement 4 is correct: Each of the Five Tathagatas symbolizes the transformation of specific negative human emotions into higher wisdom. For example:

- Akshobhya transforms anger into clarity,
- Ratnasambhava transforms pride into equality,
- Amitabha transforms desire into compassion.

This reflects a key Mahayana idea that human weaknesses can be converted into spiritual strengths.

20. (a)

Statement 1 is correct: The relics were discovered in 1898 at Piprahwa, which is identified with the ancient Kapilavastu. This links them to the historical context of the Buddha.

- **Statement 2 is correct:** A casket bears a Brahmi inscription indicating that the Sakya clan deposited the relics. This provides archaeological and historical validation.
- **Statement 3 is incorrect:** The inscription on the relic casket is in Brahmi script, not Kharosthi.



2. Major ports are under the administrative control of the Ministry of Ports, Shipping and Waterways.
3. Non-major (minor) ports are under the jurisdiction of the respective State Governments or State Maritime Boards.

Which of the statements given above are correct?

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

6. Which of the following are Major Ports of India?

- | | |
|-------------------|-----------------------|
| 1. Deendayal Port | 2. Paradip Port |
| 3. Mundra Port | 4. Visakhapatnam Port |

Select the correct answer using the code given below:

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

7. With reference to stagflation, consider the following statements:

1. It refers to a situation of high economic growth and low inflation.
2. It involves the simultaneous occurrence of high unemployment and high inflation.
3. Conventional monetary policy tools become less effective in addressing it.

Which of the statements given above is/are correct?

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

8. With reference to Credit Default Swaps (CDS), consider the following statements:

1. CDS is a financial derivative used to transfer credit risk from one party to another.
2. In a CDS contract, the protection buyer receives periodic payments from the protection seller.
3. CDS can be used both for hedging and speculative purposes.

Which of the statements given above is/are correct?

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

9. Consider the following statements about India's Dedicated Freight Corridors (DFC):

1. The DFC project was conceived and approved by the Union Cabinet in 2014.
2. The DFCs are implemented by the Ministry of Civil Aviation.

Which of the statements given above is/are correct?

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

10. With reference to India's Textile Industry, consider the following statements:

1. India's textile industry is predominantly cotton-based.
2. It is the largest employer in India after agriculture.
3. The industry is largely dominated by the organised sector.

Which of the statements given above are correct?

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

11. If the RBI decides to adopt a contractionary monetary policy, which of the following would it not do?

1. Cut and optimize the Statutory Liquidity Ratio
2. Increase the Marginal Standing Facility Rate
3. Cut the Bank Rate and Repo Rate

Select the correct answer using the code given below:

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

12. With reference to “Morchella,” sometimes mentioned in the news, consider the following statements:

1. It is a fungus belonging to the Ascomycota group.
2. It is locally known as “Kangaech” in Kashmir.
3. It is commercially cultivated in the highland regions of Uttarakhand.

Which of the statements given above is/are correct?

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

13. With reference to the Monetary Policy Committee (MPC), which of the following statements is/are correct?

1. It is responsible for fixing the benchmark interest rate in India
2. It consists of eight members, six from the Reserve Bank of India (RBI).

Select the correct answer using the code given below:

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

14. With reference to Non-Banking Financial Company (NBFC), consider the following statements:

1. NBFCs are prohibited by the Reserve Bank from associating with any unincorporated bodies.
2. NBFCs cannot issue cheques, and they are also not permitted to accept demand deposits.
3. Deposits with NBFCs are not covered by deposit insurance from the Deposit Insurance and Credit Guarantee Corporation (DICGC).

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All the three (d) None

15. The National Payments Corporation of India (NPCI), frequently seen in news, was established under which of the following laws?

- (a) Banking Regulation Act, 1949
(b) Payment and Settlement Systems Act, 2007

- (c) Reserve Bank of India Act, 1934
- (d) Companies Act, 2013

16. Consider the following statements regarding the Unified Payments Interface (UPI):

1. It was developed by the National Payments Corporation of India in 2016.
2. It allows money transfer without sharing bank account details such as IFSC code.
3. It accounts for more than 75 percent of all retail digital transactions in India.

Which of the statements given above are correct?

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

17. Consider the following statements about the impact of bank nationalisation in India:

1. Between 1969 and 1997, public sector bank branches grew by approximately 800%.
2. Nationalisation provided institutional credit that directly supported the spread of the Green Revolution.

Which of the statements given above are correct?

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

18. Consider the following statements regarding Comprehensive Economic Partnership Agreement (CEPA):

1. It is broader in scope than a Free Trade Agreement (FTA).
2. It includes provisions on services and investment.
3. Coordination of monetary policy is typically associated with CEPA.

Which of the statements given above is/are correct?

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

19. Recently, India revised the base year of its Gross Domestic Product (GDP) series to 2022–23. What is the primary objective of revising the base year in national income accounting?

- (a) To artificially increase the GDP growth rate
- (b) To align GDP estimates with exchange rate movements
- (c) To better capture structural changes and emerging sectors in the economy
- (d) To reduce the impact of inflation on nominal GDP

20. With reference to Gross Domestic Product (GDP), which of the following statements is/are correct?

1. GDP includes the value of all intermediate goods produced in an economy.
2. The current base year of GDP is 2022–23.

Select the correct answer using the code given below:

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

21. Consider the following statements regarding India's High-Value Crop sector:

1. Tamil Nadu leads in overall coconut production while Andhra Pradesh records the highest productivity among coconut-growing states.

2. Agarwood exports from India are regulated under CITES.

Which of the statements given above is/are correct?

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

22. With reference to the Syzygium (Jamun), which of the following statements is/are correct?

1. Jamun is a genus of flowering plants that belongs to the family Myrtaceae.
2. It is particularly known for its anti-diabetic properties due to compounds like jamboline.

Select the correct answer using the code given below:

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

23. With reference to India's High-Value Crop sector, which of the following statements is correct?

- (a) Tamil Nadu has the largest area under coconut cultivation while Kerala records the highest productivity among coconut-growing states.
- (b) Agarwood, also known as Oud, is primarily concentrated in the North Eastern states and its exports are regulated under the CITES framework.
- (c) Chilgoza pine nuts, referred to as the Champion of the Rocky Mountains, are primarily cultivated in the Kinnaur district of Uttarakhand.
- (d) Cashew cultivation in India is described as the Gold Mine of Wasteland because it thrives on fertile alluvial plains.

24. Consider the following statements regarding *Current Account Deficit (CAD)*:

1. CAD occurs when a country's total imports of goods and services exceed its exports.
2. A persistent CAD always leads to a balance of payments crisis.
3. CAD can be financed through capital inflows such as FDI and foreign portfolio investments.

Which of the statements given above is/are correct?

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

25. Consider the following statements regarding clean energy and fossil fuels:

1. Clean energy sources are completely free from environmental impacts across their entire lifecycle.
2. Fossil fuels are considered non-renewable because their formation takes millions of years under geological processes.
3. Renewable energy sources can face challenges related to intermittency and storage.
4. Switching to clean energy automatically eliminates all forms of greenhouse gas emissions.

Which of the statements given above are correct?

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

Which of the statements given above are correct?

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

32. With reference to Organic Farming in India, consider the following statements:

1. The National Programme for Organic Production (NPOP) is implemented by the Ministry of Commerce and Industry.
2. NPOP provides standards for certification of organic products.
3. Participatory Guarantee System (PGS) is mainly used for export certification.

Which of the statements given above is/are correct?

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

33. With reference to palm oil, consider the following statements:

1. It is one of the most land-efficient vegetable oil crops.
2. Indonesia is the largest producer, accounting for more than 50% of global output.

Which of the statements given above is/are correct?

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

34. With reference to the World Food Programme (WFP), consider the following statements:

1. It was established jointly by the United Nations General Assembly and the Food and Agriculture Organization (FAO).
2. It is funded primarily through assessed contributions of member states.
3. It received the Nobel Peace Prize in 2020 for efforts in combating hunger.

Which of the statements given above are correct?

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

EXPLANATIONS

1. (b)

Context: Prime Minister Narendra Modi visited a tea garden in Assam's Dibrugarh.

Indian Tea Industry

- **India** is the **2nd largest** tea producer and largest black tea producer.
- Indian teas are exported to various destinations like **Iran, Iraq, Syria, Saudi Arabia, Russia etc.** and is the **4th largest** tea exporter in the World.
- The Indian tea Industry is employing **1.16 million workers** directly and an equal number of people are associated with it indirectly.
- Assam grows about **55%** of the teas produced in India. India's tea production has increased by **39%** in 2022 from 2008.

2. (c)

Both the statements are correct: India is the **second largest mobile phone producer** in the world.

- India has achieved near self-reliance in mobile production- from importing 78% of its requirements in 2014–15 to manufacturing almost all devices domestically today.
- **Top 5 export destinations for Indian electronic goods in FY 2024–25** are the United States, United Arab Emirates, the Netherlands, the United Kingdom, and Italy.
- Electronics manufacturing created **25 lakh jobs in the last 10 years**.
- **India's semiconductor ecosystem** has gained significant momentum, with five landmark projects receiving approval with a total combined investment nearing Rs 1.52 lakh crores.
- **Future Projections:** It indicates that India's electronics production will reach **USD 300 billion by 2026**.

3. (d)

Statement 1 is correct: A gig worker is a person who works outside the traditional employer-employee relationship. Such work is often done on a contract, task, or piece-rate basis.

Statement 2 is correct: A platform worker is a worker who gets work through an online or digital platform. Examples include app-based delivery workers, drivers, or service providers.

Statement 3 is correct: Rajasthan was the first state to enact a dedicated law for platform-based gig workers through the Rajasthan Platform-Based Gig Workers (Registration and Welfare) Act, 2023.

4. (c)

In News: India needs to shift focus from procedural reforms to **cost rationalization**, as it faces **high business costs impacting competitiveness**. Addressing **high structural costs** like credit, land, inputs, logistics, and compliance expenses is crucial for countries like India.

Statement 1 is correct: Reducing Statutory Liquidity Ratio (SLR) frees up bank funds (earlier locked in government securities), thereby increasing credit availability to the private sector and lowering cost of capital.

Statement 2 is not correct: Cross-subsidization actually **increases** electricity tariffs for industries and commercial users to subsidize other sectors, thus raising input costs.

Statement 3 is correct: Risk-based compliance reduces unnecessary regulatory burden, especially for MSMEs, thereby lowering the cost of doing business.

5. (b)

Statement 1 is not correct: There are **14 major ports** out of which **12 Major Ports are in Operation** and 200 non-major ports (minor ports) in the country.

Statement 2 and 3 are correct: **Major Ports** are under the administrative control of the **Ministry of Ports, Shipping and Waterways**, the non-major ports are under the jurisdiction of respective **State Maritime Boards/ State Government**.

6. (b)

Context

- The major ports of India handled **915.17 million tonnes (MT)** of cargo in FY 2025–26, exceeding the target of **904 MT** and recording a **7.06%** year-on-year growth.

About

- There are **14 major ports** out of which **12 Major Ports are in Operation** and 200 non-major ports (minor ports) in the country.
 - **New ports:** Vadhavan Port in Maharashtra and Galathea Bay Port in Andaman and Nicobar Islands, have been notified as Major Ports.

- While the **Major Ports** are under the administrative control of the **Ministry of Ports, Shipping and Waterways**, the non-major ports are under the jurisdiction of respective **State Maritime Boards/ State Government**.

Operational Major Ports in India

Western Coast Ports	Eastern Coast Ports
Deendayal Port (Kandla, Gujarat)	Paradip Port (Odisha)
Mumbai Port (Maharashtra)	Visakhapatnam Port (Andhra Pradesh)
Jawaharlal Nehru Port (JNPT, Maharashtra)	Chennai Port (Tamil Nadu)
Mormugao Port (Goa)	Kamarajar Port (Ennore, Tamil Nadu)
New Mangalore Port (Karnataka)	V.O. Chidambaranar Port (Tuticorin, Tamil Nadu)
Cochin Port (Kerala)	Syama Prasad Mookerjee Port (Kolkata–Haldia, West Bengal)

7. (a)

In Context

- The ongoing US-Israel vs. Iran conflict has triggered a sharp energy supply disruption, reviving fears of 1970s-style **stagflation**.

What is Stagflation?

- **Definition:** Simultaneous occurrence of stagnant/negative economic growth + high unemployment + high inflation.
- **Term Coined By:** British politician Iain Macleod (1960s).
- **Why It's Dangerous:** Normal monetary policy tools fail, raising interest rates fights inflation but worsens unemployment; cutting rates boosts growth but fuels inflation further.

8. (b)

Statement 1 is correct: A CDS is indeed a financial derivative that transfers credit risk. The protection buyer offloads the risk of a borrower defaulting to the protection seller.

Statement 2 is not correct: This has the cash flow direction reversed. It is the protection buyer who makes periodic premium payments to the protection seller — in exchange for protection against a credit event (default). Think of it like an insurance premium: the insured (buyer) pays the insurer (seller), not the other way around.

Statement 3 is correct: CDS serves dual purposes:

- **Hedging** — A bank holding bonds uses CDS to protect against borrower default
- **Speculation** — Investors with no underlying exposure can buy CDS to bet on a borrower's likelihood of defaulting.

9. (d)

Context: The Ministry of Railways has completed the Western Dedicated Freight Corridor (WDFC), marking a major milestone in India's freight logistics modernisation.

About Dedicated Freight Corridor (DFC):

- The **Dedicated Freight Corridor (DFC)** is a flagship initiative aimed at **separating freight traffic from passenger lines** to improve efficiency and capacity.
- The project was **conceived in 2005**, and **two DFCs—Eastern DFC (EDFC) and Western DFC (WDFC)—were approved by the Cabinet in 2008**.

- Eastern DFC (EDFC): 1,337 km, from Ludhiana (Punjab) to Sonnagar (Bihar); Completed and operational.
- Western DFC (WDFC): 1,506 km, from Jawaharlal Nehru Port Terminal (Maharashtra) to Dadri (Uttar Pradesh); Recently completed.
- It is implemented by the **Dedicated Freight Corridor Corporation of India Limited (DFCCIL)**.

10. (a)

In News: India's textile industry plays a crucial role in employment, exports, and rural development. However, it faces **emerging structural challenges** like particularly **climate-induced heat stress**, which threatens its long-term sustainability.

Statement 1 is correct

- India's textile industry is largely **cotton-based**, forming a major share of production and exports.

Statement 2 is correct

- It is the **second-largest employer after agriculture** in India.

Statement 3 is not correct

- The sector is **predominantly unorganised**, with a large share of handlooms, powerlooms, and small units.

11. (c)

A contractionary monetary policy aims to reduce liquidity and make borrowing costlier in order to curb excess demand and control inflation.

Cut SLR: The Statutory Liquidity Ratio determines how much of deposits banks must keep in safe assets (like government securities). If RBI cuts SLR, banks are freed to lend more. More lending means more liquidity in the economy, which is clearly expansionary, not contractionary.

Increase MSF Rate: The Marginal Standing Facility (MSF) is a penal rate at which banks borrow from RBI in emergencies. If RBI increases the MSF rate, borrowing becomes more expensive for banks. This discourages liquidity usage and tightens money supply. Hence, this is consistent with contractionary policy and would be done.

Cut Repo Rate and Bank Rate: Repo rate and bank rate are key policy rates. If RBI cuts these rates, borrowing becomes cheaper for banks and, ultimately, for consumers and businesses. This increases credit flow and demand—clearly an expansionary move. Therefore, in a contractionary policy, RBI would not do this.

12. (a)

Statement 1 is correct: Morchella, commonly known as Guchhi or Morels, is indeed a genus of edible mushrooms belonging to the Ascomycota phylum. They are characterized by their distinctive honeycomb appearance, which is created by a network of ridges and pits.

Statement 2 is correct: In Jammu and Kashmir, these prized mushrooms are locally referred to as "Kangaech" (sometimes spelled Kanaguchh or Kangech). They are highly valued in Kashmiri cuisine and are often gathered by local communities in the wild.

Statement 3 is not correct: While researchers have made strides in domesticating this fungus, Morchella is not commercially cultivated on a large scale in the highland regions of Uttarakhand (or elsewhere in India).

13. (a)

What is the Monetary Policy Committee (MPC)?

- The MPC is a **statutory body** established under the **RBI Act, 1934** (amended in 2016).

- It is responsible for **fixing the benchmark interest rate** (repo rate) to maintain price stability while keeping growth in mind.
- **It consists of 6 members:**
 - 3 from the RBI (including the Governor as Chairperson),
 - 3 external members appointed by the Government.
- Decisions are made by majority, and each member has one vote. In case of a tie, the **RBI Governor has the casting vote.**

14. (c)

In News : The Reserve Bank of India (RBI) has released draft amendment directions and invited public comments on changes to rules for identifying Upper Layer NBFCs (NBFC-UL).

Statements 1, 2 and 3 are correct : A Non-Banking Financial Company (NBFC) is a company registered under the Companies Act (1956 or 2013) that primarily conducts financial activities like loans, advances, leasing, hire-purchase, and investment in securities.

- NBFCs are prohibited by the Reserve Bank from associating with any unincorporated bodies. It does not include companies whose main business is agriculture, industry, trading goods (other than securities), services, or real estate activities.
- NBFCs cannot accept demand deposits.
- They cannot issue cheques or operate payment systems.
- Their deposits are not insured by DICGC.

15. (b)

NPCI was established under the Payment and Settlement Systems Act, 2007. It was created as an umbrella organisation to operate retail payment and settlement systems in India. It is a joint initiative of the Reserve Bank of India and the Indian Banks' Association.

16. (d)

Statement 1 is correct: UPI was developed by the National Payments Corporation of India in 2016. It marked a major shift in India's digital payments ecosystem. It enabled seamless and instant fund transfers.

Statement 2 is correct: UPI allows transactions using a Virtual Payment Address without sharing bank account numbers or IFSC codes. This enhances convenience and security. It simplifies peer-to-peer and merchant payments.

Statement 3 is correct: UPI accounts for 81 percent of all retail digital transactions in India. This makes it the dominant payment mode in the country. It reflects its widespread adoption across sectors.

17. (c)

Statement 1 is correct: Between 1969 and 1997, public sector bank branches grew from approximately 7,219 to over 57,000, a rise of nearly 800%. This was one of the most visible outcomes of nationalisation, extending banking infrastructure deep into rural and semi-urban India.

Statement 2 is correct: Nationalisation ensured that institutional credit reached farmers at scale. The availability of formal agricultural loans through PSBs provided the financial backbone for farmers to adopt high-yielding variety (HYV) seeds, chemical fertilisers, and irrigation technology — all of which were central to the Green Revolution, especially its spread beyond Punjab and Haryana.

18. (a)

In News: India–South Korea relations have evolved significantly over the past three decades, increasingly defined by **strategic convergence**, shared developmental pathways, and alignment in global geopolitics.

Statement 1 is correct: CEPA is **broader than a traditional FTA**, as it includes not just tariff reduction on goods but also multiple areas of economic cooperation.

Statement 2 is correct: CEPA **explicitly covers services and investment**, along with areas like trade facilitation, intellectual property, etc. CEPA includes *‘trade in goods, services, and investment’*.

Statement 3 is not correct: **Monetary policy coordination is NOT a feature of CEPA.** That is typically associated with **economic unions** (e.g., Eurozone), not trade agreements like CEPA.

19. (c)

What is Base Year?

- A base year is a **benchmark year** used for comparison in **economic and statistical calculations**.
- It provides a **reference point** against which current values of indicators like GDP, CPI, and IIP are measured to track real changes over time.
- The base year is revised periodically to ensure that GDP estimates reflect the **current structure of the economy**, including new sectors such as digital services, start-ups, and evolving consumption patterns.
- It improves **data coverage, methodology, and accuracy**, making national accounts more reliable and comparable over time.
- Revising the base year does **not aim to artificially inflate growth rates**; rather, it may increase or decrease GDP depending on updated data.
- **Exchange rates are unrelated to base year revision**, and inflation adjustment is handled through real GDP and the GDP deflator, not by changing the base year itself.

20. (b)

Context

- According to the latest **World Economic Outlook (WEO)** released by the **International Monetary Fund (IMF)**, India has slipped to the **6th-largest economy** in the world in nominal GDP terms.
 - India’s GDP is estimated at **\$4.15 trillion in 2026**, behind the **United Kingdom and Japan**.

Gross Domestic Product (GDP)

- GDP is the **total monetary value of all final goods and services** produced within a **country’s domestic territory** during a specific period (usually a quarter or a year).
- **Current base year** used 2022-23 (Updated in 2026; earlier 2011–12)
- **Released By:** National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI).

21. (c)

Statement 1 is correct: As per the official Horticulture Statistics, Tamil Nadu has secured the top position in overall coconut production in India.

Statement 2 is correct: Agarwood (Aquilaria species) is listed under CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) due to its vulnerability to over-exploitation driven by its extremely high global market value as Oud.



22. (c)

Context

- A recent study has revealed that **Syzygium (Jamun)** originated much earlier than previously believed, with India playing a central role in its evolution.

About Jamun

- Jamun is a genus of flowering plants that belongs to the **family Myrtaceae**.
- The genus is widely distributed across **tropical and subtropical regions** and includes species of ecological and economic importance.
- Medicinal Properties:** Jamun holds an important place in traditional systems of medicine such as **Ayurveda and Unani**.
 - It is particularly known for its **anti-diabetic properties** due to compounds like **jamboline**.
- Distribution:** Jamun is widely distributed across India, Bangladesh, Pakistan, Sri Lanka, Malaysia, and Philippines.
- Ecological significance:** The species is often used in **social forestry programmes** as it plays a role in afforestation and reclamation of degraded lands.

23. (b)

Option (a) not correct: While Tamil Nadu has a large area under coconut, it is not the largest—that position is held by Kerala.

Option (b) correct: Agarwood (Oud), obtained from Aquilaria species, is largely found in North Eastern states like Assam, Tripura, and Arunachal Pradesh. Due to over-exploitation and its high value in perfumery, its trade is regulated under the CITES framework.

Option (c) not correct: Chilgoza (pine nuts) is mainly found in Kinnaur district of Himachal Pradesh, not Uttarakhand. The phrase “Champion of the Rocky Mountains” is unrelated here.

Option (d) not correct: Cashew is called the “Gold Mine of Wasteland” because it can grow on poor, lateritic, and marginal soils, not fertile alluvial plains.

24. (b)

In News: India seems headed for a **third consecutive year** of a **balance-of-payments deficit** with the rest of the world.

Statement 1 is correct: CAD arises when imports exceed exports (goods & services).

Statement 2 is not correct: CAD does **not always** lead to a crisis; it is sustainable if financed through stable capital inflows and within safe limits.

Statement 3 is correct: CAD is financed via capital inflows like **FDI, FPI, and external borrowings**.

25. (a)

In News: India, along with China, witnessed a **historic shift in its power sector in 2025**, where record growth in renewable energy led to a **decline in fossil fuel-based electricity generation**, marking a significant milestone in the global energy transition.

Statement 1 is not correct: Even clean energy (e.g., solar panel manufacturing, hydropower ecosystems) has **lifecycle environmental impacts**.

Statement 2 is correct: Fossil fuels take **millions of years to form**, hence non-renewable.

Statement 3 is correct: Solar/wind are **intermittent**, requiring storage or grid balancing.

Statement 4 is not correct: Clean energy reduces but does not **completely eliminate emissions** (lifecycle emissions still exist).

26. (a)

Statement 1 is not correct: NDFs are cash-settled contracts and do not involve physical delivery of the underlying currency. This is their defining feature.

Statement 2 is correct: Settlement occurs in a convertible currency (usually US dollars) based on the difference between agreed forward and prevailing spot rates. This determines the payoff.

Statement 3 is correct: NDFs are mainly traded offshore in centres such as Singapore, London, and Hong Kong. They are widely used for currencies with partial convertibility like the rupee.

27. (c)

In News: Recent **State Assembly elections** witnessed promises of **cash transfers, free electricity, transport, and goods**, seen as **populist measures playing a crucial role in inclusive growth**, poverty alleviation, and demand generation, along with cautioning against fiscal irresponsibility.

Statement 1 is correct

- Direct Benefit Transfer (DBT) transfers subsidies directly into beneficiaries' bank accounts, reducing leakages and improving efficiency.

Statement 2 is not correct

- Freebies like free electricity and transport are treated as **revenue expenditure**, not capital expenditure.

Statement 3 is correct

- Cash transfers to low-income households increase **consumption demand** due to high marginal propensity to consume, thereby stimulating aggregate demand.

28. (b)

In News : The Reserve Bank of India (RBI) has cancelled the banking licence of Paytm Payments Bank Limited, effectively barring it from carrying out any banking operations with immediate effect.

Statements 1 and 2 are correct : A Payments Bank is a type of bank introduced by the Reserve Bank of India (RBI) that aims to extend banking services to the unbanked population and promote financial inclusion in the country. Reserve Bank of India (RBI) issued guidelines for licensing of small finance banks and payments banks in 2014 .

- Payments Banks can accept deposits, limited to Rs 2 lakh, and provide services such as ATM/debit cards, remittances, mobile payments, third-party money transfers and net banking.

Statement 3 is not correct : Payments banks in India are tightly restricted and they are **not allowed to offer loans or credit cards**.

29. (b)

Section 22 of the Banking Regulation Act, 1949 mandates that no company can carry out banking business in India without obtaining a licence from the RBI. The RBI also holds the power to cancel such licences if a bank fails to meet the stipulated conditions. This makes Section 22 the foundational “entry gate” provision of the entire banking regulatory framework.

30. (c)

TOD projects typically combine **residential, commercial and recreational spaces within walkable distances of transit hubs.**

- The push is part of a broader strategy to **promote integrated urban development along mass transit networks**, including the Delhi Metro and Regional Rapid Transit System (RRTS) corridors.
- **Benefits of TOD:**
 - Higher quality of life with better places to live, work, and play.
 - Greater mobility with ease of moving around.
 - Reduced traffic congestion, car accidents and injuries.
 - Reduced household spending on transportation, resulting in more affordable housing.
 - Healthier lifestyle with more walking, and less stress.
 - Increased foot traffic and customers for area businesses.
 - Reduced dependence on foreign oil, reduced pollution and environmental damage.

31. (c)

Context: India and New Zealand signed the **India- New Zealand Free Trade Agreement (IN- NZ FTA).**

Statement 1 is correct: FTAs reduce or eliminate customs duties.

Statement 2 is incorrect: Common external tariff is a feature of a **customs union**, not a basic FTA.

Statement 3 is correct: FTAs often include services and investment provisions.

32. (a)

In News: Recently, the Prime Minister of India said that **Sikkim’s model of organic and natural farming** serves as an inspiration for the entire nation, at an event marking the **50th year of Sikkim’s Statehood.**

Statement 1 is correct: The **National Programme for Organic Production (NPOP)** is administered by Agricultural and Processed Food Products Export Development Authority (APEDA) functioning **under the Ministry of Commerce & Industry.** It regulates **export certification of organic products.**

Statement 2 is correct: **National Programme for Organic Production (NPOP)** lays down **standards for organic production, and accreditation of certification bodies.** It ensures **credibility and traceability** of organic products, especially for exports.

Statement 3 is not correct: **Participatory Guarantee System (PGS)** is a **domestic certification system**, designed for **local markets and small farmers.** Export certification is done through **NPOP**, not through the **PGS.**

33. (c)

In News: Indonesia is introducing **B50 biodiesel (50% palm oil, 50% diesel)** to reduce dependence on expensive imported oil amid global price and geopolitical pressures.

About Palm oil

- Palm oil is one of the **most efficient oil crops**, producing more oil per unit area than other vegetable oils. It meets nearly **40% of global vegetable oil demand** while using **less than 6% of the land** under oil crops.
- Indonesia is the **largest producer**, accounting for about **59% of global output**.

35. (c)

Statement 1 is correct: The World Food Programme (WFP) is the food assistance branch of the United Nations and the **world's largest humanitarian organization addressing hunger and food insecurity**.

- It was established in **1961** by the UN General Assembly and the Food and Agriculture Organization (FAO).

Statement 2 is not correct: WFP is not funded through assessed contributions (mandatory dues). Instead, it relies entirely on voluntary contributions from governments, organizations, and individuals.

Statement 3 is correct: It was awarded the **Nobel Peace Prize 2020** for efforts in combating hunger and preventing hunger from being used as a weapon of war.



6. With reference to Institutions Deemed to be Universities in India, which of the following statements is/are correct?
1. They are declared by the Union Government on the advice of the University Grants Commission (UGC).
 2. Only institutions already established as full universities can be declared deemed universities.
 3. Such institutions enjoy the academic privileges of a university.

Select the correct answer using the code below:

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

7. With reference to the Border Roads Organisation (BRO), consider the following statements:
1. It functions under the Ministry of Defence.
 2. It is responsible only for military infrastructure and does not cater to civilian needs.
 3. BRO also undertakes infrastructure projects in neighbouring countries such as Bhutan and Myanmar.

Which of the statements given above are correct?

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

8. With reference to the Cabinet Committee on Security (CCS), consider the following statements:
1. It is the apex decision-making body in India for matters related to national security and defence.
 2. It is chaired by the Prime Minister and includes the Ministers of Defence, Home Affairs, Finance, and External Affairs.
 3. It is a constitutional body established under the Constitution of India.

Which of the statements given above are correct?

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

9. With reference to the Capacity Building Commission, which of the following statements is/are correct?
1. It is a five-member Commission established in 2021.
 2. It is the custodian of the Mission Karmayogi framework, to drive civil service reforms through competency-based learning.

Select the correct answer using the code given below:

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

10. With reference to the *Information Technology Act, 2000*, consider the following statements:
1. It empowers the government to block public access to online content.
 2. It provides conditional safe harbour to intermediaries.

Which of the statements given above is/are correct?

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

11. With reference to the *Finance Commission of India*, consider the following statements:

1. It recommends the distribution of taxes between the Union and the States.
2. It determines the share of states in the divisible pool of taxes.
3. Its recommendations are binding in nature.
4. It has the power to review the functioning of the GST Council.

Which of the statements given above is/are correct?

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

12. With reference to the Food Safety and Standards Authority of India (FSSAI), consider the following statements:

1. It was established under the Food Safety and Standards Act, 2006.
2. It functions under the Ministry of Agriculture and Farmers Welfare.
3. It is responsible for regulating the manufacture, storage, distribution, sale, and import of food.

Which of the statements given above are correct?

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

13. Consider the following statements regarding the Women's Reservation Act, 2023:

1. It provides for 33% reservation for women in the Lok Sabha and State Legislative Assemblies.
2. It inserted Article 330A and Article 332A related to reservation for women in legislatures.
3. The Act provides reservation for women in the Rajya Sabha and State Legislative Councils.

Which of the statements given above are correct?

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

14. Consider the following statements regarding the Fifteenth Finance Commission's performance on Rural Local Bodies (RLBs):

1. Around 95 percent of the total allocated funds for RLBs during 2020–26 were released.
2. The release performance of the Fifteenth Finance Commission is higher than that of both the 13th and 14th Finance Commissions.
3. All states received 100 percent of their allocated grants under the Fifteenth Finance Commission.

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All three (d) None

15. With reference to the *Viksit Bharat Shiksha Adhithan (VBSA) Bill*, consider the following statements:
1. It seeks to provide a statutory framework for the implementation of the National Education Policy (NEP) 2020.
 2. It proposes the creation of separate councils for regulation, accreditation, and standard-setting in higher education.

Which of the statements given above is/are correct?

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

16. Consider the following statements regarding the removal and resignation of a High Court judge:
1. A High Court judge can resign by writing to the President.
 2. Parliamentary approval is required for a High Court judge to resign from office.
 3. The in-house inquiry mechanism is separate from the statutory process under the Judges (Inquiry) Act, 1968.

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

17. With reference to the Sindhi language and the Constitution of India, consider the following statements:
1. Sindhi is an Indo-Aryan language spoken primarily in Pakistan and also in India.
 2. The original Constitution of India was drafted only in Hindi.

Which of the statements given above is/are correct?

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

18. With reference to judicial recusal in India, consider the following statements:
1. Judicial recusal refers to a judge withdrawing from a case to avoid any real or perceived bias.
 2. In India, judicial recusal is governed by a codified statutory law.

Which of the statements given above is/are correct?

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

19. With reference to the concept of “Whip” in the Indian Parliament, consider the following statements:
1. The concept of whip is explicitly mentioned in the Constitution of India.
 2. A whip directs Members of Parliament to vote in accordance with the party line.
 3. Disobedience of a whip may lead to disqualification of a Member under certain conditions.

Which of the statements given above are correct?

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

20. With reference to Right to Vote in India, which of the following statements is/are correct?
1. Article 326 of the Constitution provides for the universal adult suffrage in India.
 2. The minimum voting age in India was reduced from 21 years to 18 years by the 61st Constitutional Amendment Act 1989.

Select the correct answer using the code given below:

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

21. With reference to labour unrest and industrial relations in India, which of the following statements is/are correct?

1. Wage disputes and poor working conditions are among the primary causes of labour protests in industrial regions.
2. The right to strike is a fundamental right under the Constitution of India.

Select the correct answer using the code given below:

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

22. With reference to the *Constitution (One Hundred and Thirty-First Amendment) Bill, 2026*, consider the following statements:

1. It proposes to increase the maximum strength of the Lok Sabha and Rajya Sabha.
2. It links the implementation of women's reservation to a delimitation exercise.

Which of the statements given above are correct?

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

23. Consider the following statements regarding the Foreign Contribution (Regulation) Act (FCRA):

1. Registration under FCRA is mandatory for NGOs receiving foreign contributions.
2. FCRA registration, once granted, is valid permanently unless cancelled by the government.
3. NGOs are required to utilise foreign funds only for the purposes for which they are received.

Which of the statements given above are correct?

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

24. With reference to Constitutional Amendment Bills in India, consider the following statements:

1. A Constitutional Amendment Bill can be introduced in either House of Parliament.
2. State Legislatures can also initiate Constitutional Amendment Bills.
3. All Constitutional Amendments require a special majority under Article 368.

Which of the statements given above is/are correct?

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

25. Consider the following statements regarding citizenship in India:
1. India allows dual citizenship similar to the United States and the United Kingdom.
 2. A person can legally hold both an Indian passport and a foreign passport simultaneously.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
26. With reference to the *Overseas Citizen of India (OCI) Card*, consider the following statements:
1. It was introduced through an amendment to the Citizenship Act, 1955.
 2. Cardholders are granted lifelong visa-free travel to India, and are entitled to voting rights in India.
 3. They can purchase agricultural land in India.
- Which of the statements given above is/are *not* correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1, 3 and 4 only (d) 2, 3 and 4 only
27. Which of the following Acts can be used for registering a Producer Organisation?
1. Multi-State Cooperative Society Act, 2002
 2. Society Registration Act, 1860
 3. Banking Regulation Act, 1949
 4. Indian Trusts Act, 1882
- Select the correct answer:
- (a) 1, 2 and 4 only (b) 1, 2 and 3 only
(c) 1 and 3 only (d) 2 and 4 only
28. With reference to the National Medical Commission (NMC), consider the following statements:
1. It was established in 2020 under the National Medical Commission Act, 2019, replacing the Medical Council of India (MCI).
 2. It consists of a Chairperson and 5 ex-officio members.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
29. With reference to the legal framework governing inter-State river disputes, consider the following statements:
1. Article 262 empowers Parliament to legislate on inter-State water disputes.
 2. Once a tribunal is constituted, judicial intervention by courts can be restricted.
 3. Climate variability increases uncertainty in water-sharing arrangements.
- Which of the statements given above are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

30. The Online Gaming Authority of India (OGAI), established as a unified regulator under the new Online Gaming Rules 2026, functions under which ministry?
- Ministry of Home Affairs
 - Ministry of Information and Broadcasting
 - Ministry of Electronics and Information Technology
 - Ministry of Finance

31. Which of the following states are covered under Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA Act)?

- | | |
|-------------------|----------------|
| 1. Andhra Pradesh | 2. Gujarat |
| 3. Jharkhand | 4. Maharashtra |
| 5. Rajasthan | |

Select the correct answer using the code given below:

- | | |
|------------------------|----------------------|
| (a) 1, 2, 3 and 5 only | (b) 1, 3 and 4 only |
| (c) 2, 4 and 5 only | (d) 1, 2, 3, 4 and 5 |

32. With reference to NITI Aayog, consider the following statements:

- It was established in 2015, replacing the Planning Commission.
- The Prime Minister serves as the Chairperson of NITI Aayog.
- The Governing Council includes Chief Ministers of States and Lieutenant Governors of all Union Territories, including Delhi and Puducherry.

Which of the statements given above is/are correct?

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

33. With reference to constitutional safeguards related to trade unions in India, consider the following statements:

- Article 19(1)(c) guarantees the right to form associations or unions.
- The Constitution guarantees the right to strike as a Fundamental Right.

Which of the statements given above is/are correct?

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

34. The 91st Constitutional Amendment Act, 2003 amended the Anti-Defection Law primarily to:

- Transfer the power to decide disqualification from the Speaker to the Election Commission
- Raise the threshold for a valid party merger from one-third to two-thirds of the legislature party
- Extend the Anti-Defection Law to members of Legislative Councils
- Make the Anti-Defection Law applicable to nominated members from the date of joining a party

35. Which of the following best describes a key difference between the Planning Commission and NITI Aayog?

- (a) Planning Commission promoted cooperative federalism, while NITI Aayog follows centralized planning
- (b) Planning Commission had executive powers, while NITI Aayog is advisory in nature
- (c) NITI Aayog formulates Five-Year Plans, while Planning Commission did not
- (d) NITI Aayog is headed by a President, while Planning Commission was headed by the Prime Minister

36. With reference to the recent ruling of the Supreme Court of India, consider the following statements:

- 1. The right to safe travel on National Highways is part of the Right to Life under Article 21 of the Indian Constitution.
- 2. Article 21 imposes only a negative obligation on the State.
- 3. Deaths due to avoidable hazards like potholes and illegal parking can amount to a violation of fundamental rights.

Which of the statements given above is/are correct?

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

37. With reference to the *Ancient Monuments and Archaeological Sites and Remains (AMASR) Act, 1958*, consider the following statements:

- 1. An ancient monument is defined as one that is at least 100 years old.
- 2. The National Monuments Authority was established after amendment in 2010.
- 3. The concept of heritage bye-laws was introduced in 2010.

Which of the statements given above is/are correct?

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

38. Consider the following statements regarding the National Statistical Office (NSO):

- 1. It was formed by merging the Central Statistics Office and the National Sample Survey Office.
- 2. It functions under the Ministry of Finance.
- 3. It is responsible for compiling national income estimates.
- 4. It conducts large-scale socio-economic surveys in India.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

39. With reference to Sikkim, consider the following statements:

- 1. It became a state of India in 1975 after a referendum.
- 2. Article 371F provides special provisions for the state.

Which of the statements given above is/are correct?

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

40. With reference to the Right to Education (RTE) Act in India, consider the following statements:

1. Article 21A was inserted by the 44th Constitutional Amendment Act, making education a Fundamental Right.
2. Under the Act, the responsibility of compulsory education lies with the government.
3. The Act mandates reservation of at least 25% seats in private unaided schools for disadvantaged children.

Which of the statements given above are correct?

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

EXPLANATIONS

1. (d)

In News: Disaster funding under the **16th Finance Commission (FC)** raises critical concerns about the design of **India's disaster finance framework**, as 27 of 36 states/UTs are exposed to recurrent disasters.

- Over 58% of the land is vulnerable to earthquakes, 12% to floods, 68% to drought, and 5,700 km of coastline is at risk from cyclones.

Statement 1 is correct: The **NDRF** is a **supplementary fund** activated when the **SDRF** is insufficient to manage severe disasters.

Statement 2 is correct: Finance Commissions (including the 15th and 16th) have allowed a **portion of SDRF to be used for "local disasters"** (state-specific disasters not notified at the national level).

Statement 3 is correct: The **16th Finance Commission** uses a **multiplicative Disaster Risk Index (DRI)**: $DRI = Hazard \times Exposure \times Vulnerability$.

2. (c)

97th Constitutional Amendment Act 2011 established the right to form cooperative societies as a **fundamental right (Article 19)**.

- It included a **new Directive Principle of State Policy on the Promotion of Cooperative Societies (Article 43-B)**.
- It added a new **Part IX-B to the Constitution** titled **"The Co-operative Societies"** (Articles 243-ZH to 243-ZT).
- It authorizes the **Parliament to establish relevant laws** in the case of **multi-state cooperative societies (MSCS)** and state legislatures in the case of other cooperative societies.

3. (c)

In News: Recently, the Union Government has **deferred discussion** on the **FCRA Amendment Bill, 2026** which triggered **political controversy**, especially ahead of the **Kerala Assembly elections**.

Statement 1 is correct

- FCRA, 2010 is administered by the **Ministry of Home Affairs (MHA)**.

Statement 2 is not correct

- Foreign contributions **cannot be used for activities detrimental to national interest under any circumstances**, even with prior approval.

Statement 3 is correct

- The Act prohibits certain categories from receiving foreign contributions, including election candidates, government servants, judges, legislators, etc.

4. (b)**Anuradha Bhasin v. Union of India Case**

- In **2020** the Supreme Court by **ruling on Jammu and Kashmir Internet shutdown** held that **indefinite internet shutdowns** by the State is not permissible under Indian Constitution.
- The apex Court further stated that **imposition of Section 144** can not be used as a mechanism to avoid genuine protest which is permitted under the Constitution.
 - **Section 144** has very specific parameters, only if those parameters are satisfied then only a Magistrate can pass the orders.
- **Key Highlights of the orders:**
 - Usage of the Internet is the **Fundamental Right under Article 19** of the Indian Constitution.
 - Internet shutdowns can be of **temporary period** but not for indefinite period.
 - Government to publish all orders imposing restrictions under Section 144.
 - The Court had also said that any order with regard to Internet Shutdowns will come under **Judicial Scrutiny**.

5. (d)**Context**

- The Madras High Court ruled that the Governor is bound by the advice of the Council of Ministers while exercising powers under **Article 161** regarding remission and premature release of convicts.

What is Article 161 of the Constitution?

- Article 161 **empowers the Governor to grant pardons, reprieves, respites, remission of punishment**, and commutation of sentences.
 - It applies to offences against laws to which the executive power of the State extends.
- **Article 161 is analogous to Article 72**, which confers similar powers on the President.
- **Article 163** establishes that a Council of Ministers, led by the Chief Minister, will **aid and advise the Governor** in exercising their functions.

Comparison of Pardoning Powers of President and Governor

- **The President** of India can grant **pardon, reprieve, respite, remission, suspension, or commutation of punishment or sentence** to any person convicted of an offence against a law under the Union's executive power.
- He can pardon, reprieve, respite, remit, suspend or commute a **death sentence**. He is the **only authority to pardon a death sentence**.
 - **The Governor cannot pardon a death sentence**. However, the Governor can suspend, remit or commute a death sentence.
- The President can exercise pardoning powers in cases where the punishment has been awarded by a **court-martial (military court)**.
 - The Governor does **not possess any such power**.

Nature of Pardoning power

- **Pardon:** It removes both the sentence and the conviction and completely absolves the convict from all sentences, punishments and disqualifications.

- **Commutation:** It denotes the substitution of one form of punishment for a lighter form.
- **Remission:** It implies reducing the period of sentence without changing its character.
- **Respite:** It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.
- **Reprieve:** It implies a stay of the execution of a sentence (especially that of death) for a temporary period.

6. (a)

Statement 1 is correct: An institution can be declared “deemed to be a university” by the Central Government on the advice of the University Grants Commission (UGC). This is an important institutional process in higher education governance.

Statement 2 is not correct: Non-university institutions can also be granted this status.

Statement 3 is correct: Once declared, these institutions enjoy academic standards and privileges similar to a university, such as offering courses, conducting research, and awarding degrees.

7. (c)

Statement 1 is correct: The Border Roads Organisation (BRO) under the **Ministry of Defence**.

Statement 2 is not correct: The BRO constructs and maintains strategic roads, bridges, tunnels and airfields in border and inaccessible regions to **meet both military and civilian needs**.

Statement 3 is correct: Through overseas infrastructure in **Bhutan, Myanmar, Afghanistan and Tajikistan**, BRO supports regional connectivity and strategic partnerships.

8. (a)

Context: PM Modi chaired a special meeting of the Cabinet Committee on Security to review the situation and mitigating measures in the context of the ongoing West Asia Conflict.

About Cabinet Committee on Security (CCS)

- It is the apex decision-making body in India responsible for matters related to national security and defence expenditure, and strategic affairs.
 - It handles **crisis situations, defence issues, and high-stakes strategic decisions**.
- **It is chaired by the Prime Minister** and includes the Ministers of Defence, Home Affairs, Finance, and External Affairs, with the **National Security Advisor** acting as a coordinator.
- It is an **extra-constitutional body** created under the **Transaction of Business Rules, 1961** of the Government of India.

9. (b)

Context

- Strengthening Adaptive Development and Humane Aptitude for National Advancement (Sādhana) Saptah 2026 is being organised as one of the largest collaborative capacity building initiatives in India.

Capacity Building Commission

- It was established in **2021**.
- It is a **three-member Commission**, supported by an **internal Secretariat headed by a Secretary**.
 - **Members** have been appointed from **diverse backgrounds** such as private sector, academia, public sector, and civil society.
- CBC is the **custodian of the Mission Karmayogi framework**, to drive civil service reforms through capacity building and competency-based learning.

- The **Commission designs frameworks, sets standards, and encourages collaboration** to make governance more transparent, accountable, citizen-centric, and future-ready.

10. (c)

In News: Recent blocking of video of comedian Pulkit Mani under **Section 79(3)(b) of the IT Act** highlights growing concerns over **opaque and arbitrary digital censorship** in India. It exemplifies a broader **systemic issue of executive-driven online censorship**.

- **Information Technology Act, 2000:**
 - **Section 69A:** It empowers the government to block websites/content; and is **upheld by the Supreme Court** with procedural safeguards.
 - **Section 79:** It grants **safe harbour** to intermediaries; and requires removal of content upon government or court orders.
- **IT Rules, 2021 (and subsequent amendments):** Regulate **social media intermediaries, OTT platforms, and digital news**.
 - Introduced **content takedown mechanisms, grievance redressal, and compliance norms**.

11. (a)

In News: The **16th FC** marks a **transformational shift in fiscal decentralisation**, with an unprecedented focus on **Panchayats and Urban Local Bodies (ULBs)**, however there are concerns regarding **accountability, state autonomy, and institutional capacity**.

Statement 1 and 2 are correct

- Finance Commission's primary role is to recommend distribution of taxes between Centre and States (**vertical devolution**), and share of states in the divisible pool

Statement 3 and 4 are not correct

- FC's recommendations are **advisory, not binding** (the government may accept or modify them).
- It has **no role regarding the GST Council**.

12. (c)

Statement 1 is correct: It has been established under the **Food Safety and Standards Act, 2006**.

Statement 2 is not correct: Administrative Authority: Ministry of Health & Family Welfare.

Statement 3 is correct: It has been created for laying down **science based standards** for articles of food and to regulate their **manufacture, storage, distribution, sale and import** to ensure availability of **safe and wholesome food for human consumption**.

13. (a)

Statement 1 is correct: The Act provides 33% reservation for women in the Lok Sabha and State Legislative Assemblies. This aims to enhance women's political representation. It is a major step toward gender equality in governance.

Statement 2 is correct: The Act inserted Article 330A and Article 332A to provide reservation for women in the Lok Sabha and State Assemblies. These provisions create the constitutional basis for reservation. They operationalise women's representation in legislatures.

Statement 3 is not correct: The Act does not provide reservation in the Rajya Sabha or State Legislative Councils. Its scope is limited to the Lok Sabha, State Assemblies and Union Territories with Assembly.

14. (b)

Statement 1 is correct: Around 95 percent of the allocated funds were released during 2020–26. This represents the highest release performance since such grants began.

Statement 2 is correct: The release rate was 91 percent during the 14th Finance Commission and 90.5 percent during the 13th. The Fifteenth Finance Commission exceeded both with a higher release rate.

Statement 3 is not correct: Only five states, namely, Assam, Kerala, Mizoram, Tripura, and Uttar Pradesh received 100 percent of their allocated grants. It was not the case for all states.

15. (c)

In News: The proposed **Viksit Bharat Shiksha Adhishthan (VBSA) Bill** seeks to operationalise the **National Education Policy (NEP) 2020**. However, concerns arise regarding **constitutional validity, federal balance, institutional autonomy, and social justice**.

Statement 1 is correct

- The VBSA Bill aims to **give statutory backing to NEP 2020**, transforming policy recommendations into a legal framework.

Statement 2 is correct

- The Bill proposes a **three-tier institutional structure**:
 - Regulatory Council (Viniyaman Parishad)
 - Accreditation Council (Gunvatta Parishad)
 - Standards Council (Manak Parishad).

16. (b)

Statement 1 is correct: A High Court judge resigns by writing to the President under Article 217(1)(a). This is a constitutional provision governing resignation.

Statement 2 is not correct: There is no requirement of parliamentary approval for resignation. The process is unilateral and takes effect upon communication to the President.

Statement 3 is correct: The in-house inquiry committee is separate from the statutory process under the Judges (Inquiry) Act, 1968. It is an internal mechanism of the judiciary. The statutory process involves Parliament and formal inquiry.

17. (a)

In News: Recently, the Vice-President released the latest version of the **Constitution of India in the Sindhi language** in both **Devanagari and Persian scripts**.

About Sindhi

- It is an **Indo-Aryan language spoken** in Pakistan and in India, with smaller communities worldwide.
- It was officially included in the **Eighth Schedule of the Constitution of India** by the **21st Constitutional Amendment Act 1967**.
- It is one of the oldest and most melodious languages with a rich literary tradition blending Vedantic and Sufi philosophies that promote unity, love, and brotherhood.

Original Language of the Constitution

- **Drafted originally in English**, a Translation Committee under **Ghanshyam Das Gupta** produced the official Hindi version.
- Both English and Hindi versions were signed by **Constituent Assembly members and submitted to Rajendra Prasad on 24 January 1950**.

18. (a)

Context: Recently, former Delhi Chief Minister Arvind Kejriwal urged a Delhi High Court judge to recuse herself from hearing the CBI's appeal in the excise policy case.

So, what is judicial recusal?

- It is when a judge voluntarily withdraws from a case to avoid any real or perceived bias. The principle is simple: no one should be a judge in their own cause.
- Who decides this? The judge herself, based on conscience and judicial discretion. It can also be requested by lawyers or the parties involved.
- Once a judge recuses, the case is reassigned by the Chief Justice to a new bench.

Are there formal rules?

- Unlike the United States, India does not have a codified law on judicial recusal.
- Instead, it is guided by Supreme Court judgments—like *Ranjit Thakur* and *Shivananda Pathak*—along with judicial conventions.

19. (b)

Statement 1 is not correct: A whip refers to an order to members of a party in the House to abide by a certain direction of the party.

- It is not mentioned in the constitution but is considered a parliamentary convention.

Statement 2 and 3 are correct: Political parties issue whips to their MPs to either vote for or against the bill, depending on their party line.

- Once the whip is issued, the MPs from each party will **necessarily have to obey the whip** or else risk losing their seat in Parliament.
- The term is derived from the old **British practice of “whipping in”** lawmakers to follow the party line.
- Parties appoint a senior member from among their House contingents to issue whips — this member is called a **chief whip**, and he/ she is assisted by **additional whips**.

20. (c)**Context**

- The Supreme Court of India has reiterated that a person born in India has the right to remain on the electoral roll and to vote.

Right to Vote in India

- **Article 326** of the Indian Constitution provides that every citizen of India, not less than **18 years of age** is entitled to be registered as a voter for Elections to the House of the People and Legislative Assembly of every State on the basis of **adult suffrage**.
 - The minimum voting age in India was reduced from 21 years to 18 years by the 61st Constitutional Amendment Act 1989.
- However, voting is a **statutory right**, not a fundamental right (as held by the Supreme Court of India in various judgments).
 - In the case of **N.P. Ponnuswami v. Returning Officer (1952)**, the Supreme Court of India held that the right to vote and the right to contest elections are statutory rights.
 - The SC in **Kuldip Nayar v. Union of India (2006)** reiterated that voting is a **statutory right**, though crucial for democracy.

21. (a)**Context**

- The recent violent protests in Noida have highlighted a growing wave of labour unrest across India’s industrial belts, including Manesar, Surat, Panipat, and Barauni.

Nature and Spread of Protests

- The protests have involved **large-scale mobilisation of workers** across multiple industrial sectors, including **textiles, automobiles, refineries, and electronics**, across several industrial clusters in **North and Western India**.
- Initially began as peaceful demonstrations, it **gradually escalated into violent incidents** involving arson, vandalism, and clashes with law enforcement authorities.

Underlying Causes of Labour Unrest

- **Wage Stagnation:** Workers anticipated wage increases following implementation of labour reforms. However, expected benefits have not materialised on the ground, leading to frustration.
- **Informalisation and Contractualisation:** A large proportion of industrial workers are employed on contractual terms causing **lack of job security, lower wages compared to permanent workers** and limited access to social protection.
 - This has **created a dual labour market structure**, increasing inequality within the workforce.
- **Spillover Effect:** Protests in one industrial hub influenced others, especially between **Manesar and Noida**, indicates growing networked labour consciousness.
- **Rising Cost of Living:** Global disruptions, particularly around the Strait of Hormuz, have led to increased fuel and LPG prices and higher cost of essential commodities affecting migrant workers disproportionately.
- **Uneven Minimum Wage Revisions:** Wage revisions have been infrequent and uneven across states. **Example:** Haryana revised wages after nearly a decade.
 - This has triggered comparative grievances among workers in neighbouring regions.
- **Statement 2:** In India, the right to strike is **not** a fundamental right under the Constitution.
 - While **Article 19(1)(c)** guarantees the fundamental right to form associations or unions, the Supreme Court has clarified (in cases like T.K. Rangarajan v. Government of Tamil Nadu) that this does not include a fundamental right to strike.
 - Instead, the **right to strike is a statutory/legal right** governed by specific procedures and restrictions under the **Industrial Disputes Act, 1947**, and the Industrial Relations Code, 2020.

22. (b)

In News: Recently, the Union Government has introduced **three crucial Bills** including the 'Constitution (One Hundred and Thirty First Amendment) Bill, 2026' that is expected to reshape **India's parliamentary structure and federal balance**.

Statement 1 is not correct: The Bill proposes to **raise the maximum strength of the Lok Sabha from 550 to 850**. However, there is **no provision** in the amendment to proportionately increase Rajya Sabha strength. The focus is on **Lok Sabha and State Assemblies**, not the Upper House.

Statement 2 is correct: It provides that **one-third of seats shall be reserved for women**. Key conditions include effective **after delimitation**, and reservation valid for **15 years from commencement**.

23. (a)

Statement 1 is correct: NGOs must obtain FCRA registration to receive foreign contributions. Alternatively, they may seek prior permission for specific donors and projects.

Statement 2 is not correct: FCRA registration is valid for five years and requires renewal thereafter. It is not permanent in nature. The validity period ensures periodic review and compliance.

Statement 3 is correct: NGOs must utilise foreign funds only for declared objectives. This ensures accountability and prevents misuse of funds. It is a core compliance requirement under the Act.

24. (a)

Context: The Union Government is set to introduce three amendment Bills to operationalise the **Nari Shakti Vandan Adhiniyam, 2023**, which provides 33% reservation for women in the Lok Sabha and State Assemblies, so that it can be implemented after delimitation ahead of the 2029 general elections.

Constitution Amendment Bill

- It is a legislative proposal introduced in Parliament to **modify, add, or repeal provisions of the Constitution of India**.
- Can be introduced in **either House of Parliament (Lok Sabha or Rajya Sabha)**.
- Only **Parliament** has the power to initiate (States cannot introduce such Bills).

Types of Amendments

- Amendments are primarily carried out under **Article 368**, requiring a special majority of Parliament (and state ratification where necessary).
- However, certain provisions of the Constitution can also be amended by a **simple majority of Parliament**, which are not treated as amendments under Article 368.

25. (d)

Context: A case before the Allahabad High Court involving alleged British citizenship of Leader of the Opposition in the Lok Sabha, Rahul Gandhi, has brought renewed focus on the issue of dual citizenship in India.

Does India allow dual citizenship like the United States or the United Kingdom?

- The Indian Constitution deals with citizenship under Articles 5 to 11 in Part 2.
- Under Section 9 of the **Citizenship Act, 1955**, an Indian citizen automatically loses citizenship if they voluntarily acquire citizenship of another country.
- The Constitution also does not permit holding Indian and foreign citizenship simultaneously.
- Further, since a passport is linked to citizenship, a person cannot legally hold both an Indian passport and a foreign passport at the same time. Doing so would violate India's legal framework on citizenship.

26. (b)

In News: India's Vice-President announced a **policy shift** regarding the **Overseas Citizen of India (OCI) card**, alongside discussions on bilateral cooperation, economic assistance, and the fishermen issue during his visit to **Sri Lanka**.

Statement 1 is correct: **Overseas Citizen of India (OCI) Card** is a form of **permanent residency status** granted to foreign citizens of Indian origin. It was introduced through an amendment to the **Citizenship Act, 1955 (in 2005)** as part of India's **diaspora engagement policy**.

- It was merged with Person of Indian Origin (PIO) **in 2015**.

Statement 2 is not correct: OCI Cardholders are granted lifelong visa-free travel to India, but they **do NOT enjoy** voting rights, the right to hold **constitutional/public offices**, employment in **government services**, and political rights.

Statement 3 is not correct: OCI cardholders can purchase residential and commercial properties; and **cannot purchase agricultural land, plantation property**.

27. (a)

Context

- Farmer Producer Organisations (FPOs) have emerged as a vital collective mechanism to empower small and marginal farmers, and in strengthening India's food security.

Farmer Producer Organisations (FPOs)

- A Producer Organisation (PO) is a **legal entity formed by primary producers**, viz. farmers, milk producers, fishermen, weavers, rural artisans, craftsmen.
- A PO can be a **producer company, a cooperative society or any other legal form** which provides for sharing of profits/benefits among the members.
- The **Small Farmers' Agribusiness Consortium (SFAC)** plays a key role in promoting FPOs in India.
- Producer Organisation can be registered under any of the **following legal provisions**:
 - Cooperative Societies Act/ Autonomous or Mutually Aided Cooperative Societies Act** of the respective State
 - Multi-State Cooperative Society Act, 2002**
 - Producer Company under **Indian Companies Act, 1956**, as amended in 2013
 - Section 25 Company of **Indian Companies Act, 1956**, as amended as Section 8 in 2013
 - Societies registered under **Society Registration Act, 1860**
 - Public Trusts registered under **Indian Trusts Act, 1882**.

28. (a)

Context: The **National Medical Commission (NMC)** has proposed amendments to the **Registration of Medical Practitioners and Licence to Practice Medicine (Amendment), Regulations, 2026**, aiming to expand medical education capacity while strengthening quality standards.

About National Medical Commission (NMC)

- NMC is **India's apex statutory body** responsible for regulating medical education, professionals, and institutions.
- It was established in 2020**, under the **National Medical Commission Act, 2019**, replacing the **Medical Council of India (MCI)** to streamline governance and improve the quality of healthcare nationwide.
- It operates through **four autonomous boards**;
 - Under-Graduate Medical Education Board (UGMEB)
 - Post-Graduate Medical Education Board (PGMEB)
 - Medical Assessment and Rating Board (MARB)
 - Ethics and Medical Registration Board (EMRB)
- Structure of NMC:** The NMC consists of;
 - A Chairperson.
 - 10 ex-officio members (including representatives from ministries and institutions).
 - 22 part-time members (including State representatives and experts).

29. (d)

Statement 1 is correct: Article 262 provides constitutional authority to Parliament to legislate on inter-State river disputes. It forms the legal basis of dispute resolution mechanisms.

Statement 2 is correct: Article 262 also allows restriction of judicial intervention once a tribunal is set up. This ensures disputes are handled within a specialised framework.

Statement 3 is correct: Climate variability such as erratic monsoons and droughts increases uncertainty. It complicates long-term water-sharing arrangements.

30. (c)

Context

- The Government has notified the **Promotion and Regulation of Online Gaming Rules, 2026** under the **Promotion and Regulation of Online Gaming Act, 2025** to regulate online gaming, curb money gaming, and protect users.

Key Provisions of the Rules

- **Regulatory Authority:** The rules establish the **Online Gaming Authority of India (OGAI)** as a unified, digital-first regulator under the **Ministry of Electronics and Information Technology**.
 - It maintains the list of online money games, handles complaints, issues directions and codes of practice, hears appeals, and coordinates with financial and law-enforcement agencies.
- **Determination of Online Games:** The Rules prescribe a time-bound determination mechanism to classify games as online money games.
 - Determination may be initiated **suo motu** by the Authority, **on application by service providers, or through Government notification**.
- **Registration Requirements:** E-sports games and related entities are required to mandatorily register with the authority.
 - **Online social games are not required** to register by default, and registration is triggered only when notified by the Government.
- **User Safety Features:** The Rules mandate risk-based user safety features, including age verification, parental controls, time limits, reporting tools, counselling support, and fair-play monitoring.
- **Grievance Redressal Mechanism:** Every online game service provider offering an online social game or e-sport must establish a functional grievance redressal mechanism.
 - A user dissatisfied with the provider's resolution (or in case of non-redressal) may approach the **Authority within 30 days**, which shall endeavour to dispose of the appeal within a further **30 days**.
 - A second appeal lies before the **Appellate Authority** i.e., the **Secretary, MeitY**.

31. (d)

In News : The Ministry of Panchayati Raj celebrated National Panchayati Raj Day (NPRD) in New Delhi.

- The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA Act) extends the provisions of panchayats to the Scheduled Areas, strengthening Gram Sabha-led governance across tribal regions. PESA spans across 45 districts in their entirety, and to 63 districts in part, where only selected areas fall under its jurisdiction. This structure supports decentralised, community-driven governance. PESA Act is applicable to Fifth Schedule areas of 10 States - **Andhra Pradesh**, Chhattisgarh, **Gujarat**, Himachal Pradesh, **Jharkhand**, Madhya Pradesh, **Maharashtra**, Odisha, **Rajasthan** and Telangana. Nine States have notified their State PESA Rules, except Odisha.

32. (a)

Context

- Prime Minister Narendra Modi has reconstituted NITI (National Institution of Transforming India) with the appointment of noted economist, Ashok Lahiri as Vice-Chairman and four new full-time members.

About NITI Aayog

- **Established:** NITI Aayog (National Institution for Transforming India) is a government think tank established in **2015**.
- **Aim:** It replaced the Planning Commission, aiming to focus on more **contemporary challenges like sustainable development, policy innovation, and governance reforms**.
- **Composition:** It is led by the Prime Minister as the Chairperson, with the Vice-Chairperson and CEO leading the executive functions.
- **Governing Council:** The Prime Minister of India,
 - It comprises the Chief Ministers of states and Union Territories,
 - The Lieutenant Governors of Union Territories, except Delhi and Puducherry,
 - The Vice Chairman of NITI Aayog,
 - Full-time members of NITI Aayog.

33. (a)**Context**

- In the background of a number of protests for minimum wages; expansion of the social security ambit; and against the contractualisation of jobs, the **role of trade unions have come up for discussion**.

Constitutional Safeguards related to Trade Unions

- **Fundamental Right: Article 19(1)(c)** guarantees the right to form associations or unions. However, this right is not absolute, Article 19(4) allows reasonable restrictions in the interest of: Public order, Morality, Sovereignty and integrity of India.
 - The Constitution does not guarantee the right to strike, The Supreme Court has clarified that the right to form unions is not the right to strike.
- **Directive Principles of State Policy (DPSPs) guide the State in labour welfare:**
 - **Article 38:** Promote social order based on justice.
 - **Article 39:** Ensure adequate livelihood and prevent exploitation.
 - **Article 41:** Right to work, education, and public assistance.
 - **Article 42:** Just and humane working conditions, maternity relief.
 - **Article 43:** Living wage and decent standard of life.
 - **Article 43A:** Participation of workers in management of industries.

34. (b)

The 91st Constitutional Amendment Act of 2003 was brought in to plug the loopholes of the original Anti-Defection Law (10th Schedule) added in 1985. The primary intent was to stop the practice of “retail” defections, where small groups of MLAs or MPs would switch sides for personal gain or ministerial berths. By amending the 10th Schedule, the Act removed the provision that protected a “split” (which only required 1/3rd of the members to break away) and replaced it with a much stricter merger requirement. Now, for a group to avoid disqualification, at least two-thirds (2/3rds) of the legislative party must agree to merge with another party. This change made it significantly harder for individual members to destabilize a government without a massive consensus within their own ranks.

35. (b)

Context: The Prime Minister, Narendra Modi, has reconstituted NITI Aayog, appointing noted economist **Ashok Lahiri as Vice-Chairperson** and replacing four of its five full-time members.

The key differences between the Planning Commission and NITI Aayog are:

Aspect	Planning Commission	NITI Aayog
Purpose	Centralized five-year planning and resource allocation.	Focus on cooperative federalism, long-term development, and policy research.
Structure	Led by the Prime Minister with a Deputy Chairman and full-time members.	Led by the Prime Minister with a Vice-Chairperson, CEO, and Governing Council.
Approach	Top-down, centralized planning.	Bottom-up, encouraging state participation and cooperation.
Role in Governance	Executive authority over policy implementation.	Advisory body, without direct enforcement power.
Five-Year Plans	Formulated and implemented Five-Year Plans.	Does not formulate Five-Year Plans, focuses on long-term policy.

36. (a)

Context: The Supreme Court of India has held that the right to safe travel on National Highways (NHs) is part of the right to life under Article 21.

Constitutional Interpretation

- The Court clarified that Article 21 imposes a **positive obligation** on the State to ensure a safe environment for commuters.
- Deaths caused by avoidable hazards such as **illegal parking, potholes, or unsafe infrastructure** amount to a failure of this duty.

37. (d)

In News: India’s heritage protection regime is **over-centralised, uniform, and counterproductive**, often failing both conservation and development objectives.

- Rigid buffer-zone approaches, weak enforcement, and lack of contextual planning undermine heritage management and urban growth simultaneously.

Statement 1 is correct

- The AMASR Act defines an *ancient monument* as one that is **at least 100 years old**.

Statement 2 is correct

- The **National Monuments Authority (NMA)** was established through the **AMASR (Amendment) Act, 2010**.

Statement is correct

- The **2010 Amendment** introduced **heritage bye-laws** for site-specific regulation and management of protected monuments.

38. (c)

Statement 1 is correct: The NSO was formed in 2019 by merging the Central Statistics Office (CSO) and the National Sample Survey Office (NSSO). This integration streamlined statistical functions.

Statement 2 is not correct: The NSO functions under the **Ministry of Statistics and Programme Implementation**. It is not under the Ministry of Finance.

Statement 3 is correct: The NSO compiles national income estimates such as GDP and GNP. This is a core function related to economic measurement.

Statement 4 is correct: The NSO conducts large-scale socio-economic surveys like the Periodic Labour Force Survey. These surveys provide key data for policy-making.

39. (c)

Context: Recently, the Prime Minister of India said that **Sikkim's model of organic and natural farming** serves as an inspiration for the entire nation, at an event marking the **50th year of Sikkim's Statehood**.

Sikkim Statehood Day

- Sikkim became the **22nd state of India on 16 May 1975** after a referendum.
- It transitioned from a **monarchy under the Chogyal** to a full-fledged democratic state.
- **Article 371F:** Special provisions for Sikkim.
- It shares borders with **China (Tibet), Bhutan, and Nepal**.
- It is critical for **India-China relations**; and border infrastructure and security policy.

40. (b)

Statement 1 is not correct: The Right to Education (RTE) was originally a **Directive Principle of State Policy (DPSP) under Article 45** before becoming a Fundamental Right.

- It was moved from the **non-justiciable DPSP to Part III as a Fundamental Right (Article 21A)** via the **86th Constitutional Amendment Act, 2002**, making it an enforceable right.

Statement 2 and 3 are correct: The Right of Children to Free and Compulsory Education (RTE) Act, 2009, mandates that the government (central and state) is responsible for ensuring free and compulsory elementary education to all children aged 6 to 14.

- It requires all **private schools** to **reserve 25% of seats** to children (to be reimbursed by the state as part of the public-private partnership plan).
 - Children are admitted into private schools based on **economic status or caste based reservations**.

6. Which Indian states share a border with Bangladesh?

- | | |
|----------------|------------|
| 1. West Bengal | 2. Assam |
| 3. Meghalaya | 4. Tripura |
| 5. Mizoram | |

Select the correct answer:

- | | |
|------------------------|------------------------|
| (a) 1, 2, 3 and 4 only | (b) 1, 3, 4 and 5 only |
| (c) 1, 2, 3 and 5 only | (d) 1, 2, 3, 4 and 5 |

7. The Baltic Sea is connected to St. Petersburg through which of the following?

- | | |
|---------------------|---------------------|
| (a) Gulf of Bothnia | (b) Gulf of Finland |
| (c) Gulf of Riga | (d) Kattegat Strait |

8. With reference to Qeshm Island, consider the following statements:

1. It is the largest island in the Persian Gulf.
2. It is separated from the Iranian mainland by the Strait of Hormuz.

Which of the statements given above is/are **not correct**?

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

9. With reference to the Siwalik Hills, which of the following statements is/are correct?

1. Shivaliks are the southernmost and lowest outer foothills of the Himalayan mountain system.
2. It is composed of unconsolidated sediments, sandstone, clay, and conglomerate.

Select the correct answer using the code given below:

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

10. Consider the following statements:

1. Wular Lake is the largest freshwater lake in India and is fed by the Jhelum River.
2. Surinsar Lake and Mansar Lake are recognized as Ramsar sites.

Which of the statements given above is/are correct?

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

11. The Sijimali bauxite mine, recently in the news, is located in which of the following states?

- | | |
|---------------|--------------------|
| (a) Jharkhand | (b) Chhattisgarh |
| (c) Odisha | (d) Andhra Pradesh |

12. With reference to the Andaman and Nicobar Islands, consider the following statements:

1. The southernmost island of the group lies about 150 km from Sumatra in Indonesia.
2. Saddle Peak, the highest point of the islands, is located in Great Nicobar.
3. Barren Island is the only confirmed active volcano in South Asia.

Which of the statements given above are correct?

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

13. Consider the following statements regarding Mauritius:

1. It is an island country located in the Indian Ocean, east of Madagascar.
2. Physiographically, it is part of the Mascarene Islands.

Which of the statements given above is/are correct?

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

14. Consider the following statements regarding the *Atlantic Meridional Overturning Circulation (AMOC)*:

1. It transports warm surface water from the tropics to the North Atlantic.
2. It is driven solely by wind patterns in the Atlantic Ocean.
3. Freshwater influx from melting Greenland ice can weaken it.
4. It plays a role in regulating climate in Europe.

Which of the statements given above are correct?

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

15. Consider the following statements:

1. The Southwest Monsoon accounts for the majority of India's annual rainfall.
2. The Northeast Monsoon primarily affects northwestern India.
3. El Niño and La Niña are phases of the El Niño Southern Oscillation.

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All three (d) None

16. With reference to *heatwaves in India*, consider the following statements:

1. A heatwave is declared when the maximum temperature reaches at least 40°C in plains and 30°C in hilly regions.
2. A 'severe heatwave' is declared when the departure from normal temperature exceeds 6.4°C.
3. Coastal regions cannot be classified under heatwave conditions due to moderating influence of the sea.

Which of the statements given above is/are correct?

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

17. Which of the following statements are correct about the Andaman Sea?

1. It is a marginal sea in the northeastern Indian Ocean.
2. It is bordered by Myanmar, Thailand and Malaysia.
3. It connects to the South China Sea through the Strait of Malacca.

Select the correct answer using the code given below:

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

18. Scarborough Shoal, recently in news, is located in which of the following water bodies?
- (a) East China Sea (b) South China Sea
(c) Philippine Sea (d) Celebes Sea
19. With reference to the Ghaggar River, consider the following statements:
1. It flows through Punjab, Haryana, and Rajasthan.
 2. The Markanda and Sarsuti rivers are among its tributaries.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
20. With reference to the Amazon Rainforest and Amazon River, consider the following statements:
1. The Amazon River originates in the Andes Mountains of Peru.
 2. Rio Negro and Madeira are major tributaries of the Amazon River.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
21. The Colorado River drains into:
- (a) Pacific Ocean (b) Caribbean Sea
(c) Gulf of Mexico (d) Gulf of California
22. Lumpongden Island, recently in news, is located in:
- (a) Assam (b) Meghalaya
(c) Manipur (d) Tripura
23. With reference to the Salween River, consider the following statements:
1. It is known as Nu in China and Thanlwin in Myanmar.
 2. It is the longest river in Southeast Asia.
 3. It originates from the Tanggula Mountains on the Tibetan Plateau.
- Which of the statements given above is/are correct?
- (a) 1 and 3 only (b) 1 and 2 only
(c) 2 and 3 only (d) 1, 2 and 3
24. Consider the following statements regarding bauxite:
1. Bauxite is the primary source of aluminium.
 2. Bauxite forms in tropical and subtropical regions through weathering.
 3. India is the largest producer of bauxite in the world.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
25. Which of the following countries share a land border with Egypt?
1. Libya
 2. Sudan
 3. Israel
 4. Jordan

Select the correct answer using the code below:

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

26. Which of the following countries share a land border with Germany?

1. Denmark 2. Poland
3. Hungary 4. France
5. Netherlands

Select the correct answer using the code below:

- (a) 1, 2 and 4 only (b) 1, 2, 4 and 5 only
(c) 2, 3, 4 and 5 only (d) 1, 3 and 5 only

27. With reference to the MENA region, consider the following statements:

1. MENA stands for Middle East and Northern Africa.
2. The region extends from Iran in the east to Morocco and Tunisia in the west.
3. The region is strategically important due to its dominance in global energy resources.

Which of the statements given above are correct?

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

28. With reference to the Chabahar Port, consider the following statements:

1. It is the only Iranian port with direct access to the Indian Ocean.
2. It lies east of the Strait of Hormuz.
3. It enables India to bypass both Pakistan and Afghanistan for trade with Central Asia.

Which of the statements given above are correct?

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

29. With reference to Luzon Island, consider the following statements:

1. It is the largest island of the Philippines and lies in the southern part of the archipelago.
2. It is bounded by the Philippine Sea to the east and the South China Sea to the west.
3. It lies outside the Pacific Ring of Fire and is therefore geologically stable.

Which of the statements given above are *not* correct?

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

30. With reference to the Atacama Desert, consider the following statements:

1. It is the driest non-polar desert in the world.
2. It extends into parts of Peru, Bolivia, and Argentina.
3. The region is ideal for astronomical observations due to its dry climate and minimal cloud cover.

Which of the statements given above are correct?

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

31. Which of the following countries border Kenya?

- | | |
|----------------|-------------|
| 1. Ethiopia | 2. Eritrea |
| 3. South Sudan | 4. Tanzania |

Select the correct answer using the code given below:

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

EXPLANATIONS

1. (d)

All three statements are correct: Bitumen is a **black, viscous mixture of hydrocarbons** produced by the **fractionation of crude oil**, and it serves as a **crucial binder in road construction**.

- The process of making bio-bitumen involves **collection of post-harvest rice straw, palletisation, pyrolysis to produce bio-oil**, and subsequent **blending with conventional bitumen**.

2. (b)

Statement 1 is correct: The Bab el-Mandab Strait is situated at the southern tip of the Red Sea. This makes it an important link between the Red Sea and the Indian Ocean region.

Statement 2 is correct: It connects the Red Sea with the Gulf of Aden, which then opens into the Arabian Sea and Indian Ocean. This gives it huge strategic importance for trade and shipping.

Statement 3 is not correct: The strait lies between Yemen and the Horn of Africa, not Oman and Iran.

3. (c)

It originates in the Pushkar Valley of the Aravalli Range, near Ajmer, Rajasthan. It is an endorheic (inland) river, meaning it does not reach the ocean. Instead, it gets lost in the marshy lands of the **Rann of Kachchh** in Gujarat. The river is freshwater for its first 100 km (until Balotra in Barmer), but becomes increasingly saline as it flows further due to the high salt content of the desert soil. Its key tributaries include the Sukri, Mithri, Bandi, and Jawai.

4. (c)

Context: A magnitude 7.4 earthquake struck the Northern Molucca Sea off Indonesia's Ternate island.

About Indonesia

- Basic Geography:
 - World's largest archipelagic state, located between the Indian and Pacific Oceans, off mainland Southeast Asia.
 - Major islands: Sumatra, Java, Kalimantan (Borneo), Sulawesi, Papua.
 - It shares land borders with East Timor (Timor-Leste), Papua New Guinea, and Malaysia.
 - Capital: Jakarta (on the island of Java); new capital being developed — Nusantara in Kalimantan
 - Largest Muslim-majority nation by population in the world.
- Tectonic Setting:
 - Located on the Pacific Ring of Fire, the seismically active belt where ~90% of the world's earthquakes occur.

- It hosts one of the world’s highest densities of active volcanoes, stretching from Sumatra through Java to the Lesser Sunda Islands.
- The Molucca Sea — where the recent earthquake originated — is a highly active tectonic zone in Indonesia’s northern region.
- Global and Regional Role:
 - Founding member of the Non-Aligned Movement (NAM) along with India.
 - Founding member of ASEAN (1967) — ASEAN Secretariat is headquartered in Jakarta.
 - Indonesia became a full member of BRICS at the 16th Summit held under Russia’s chairship in Kazan.
 - Member of G20 and hosted the G20 Summit in Bali in 2022.
 - Member of IONS (Indian Ocean Naval Symposium) — a maritime cooperation platform conceptualised by India in 2008.



5. (b)

Context

- A year after tensions following Operation Sindoor, India and Azerbaijan have initiated efforts to normalise bilateral relations, with the 6th round of Foreign Office Consultations in Baku, marking the first such engagement since 2022.

Background

- Operation Sindoor Fallout: Azerbaijan, along with Turkey, expressed support for Pakistan following the military operation of India, citing the “Three Brothers” bloc alliance.
- Geopolitical Alignments: Azerbaijan shares close strategic ties with Pakistan, as the latter supports Azerbaijan in the Nagorno-Karabakh conflict.
- Nagorno-Karabakh is a landlocked, mountainous region in the South Caucasus that has been at the center of a long-standing territorial and ethnic conflict between Armenia and Azerbaijan.

6. (d)

In News: Recently, the **Border Security Force (BSF)** has initiated discussions on exploring the **use of reptiles such as snakes and crocodiles** in vulnerable riverine stretches along the **India–Bangladesh border**, as natural deterrence, terrain constraints, and supplement to existing measures.

- India shares a **long international border with Bangladesh (~4,096 km)**, and **five Indian states** lie along this boundary.
- **States sharing border with Bangladesh:**
 - **West Bengal** – shares the longest stretch of the border
 - **Assam**

- Meghalaya
- Tripura (almost surrounded by Bangladesh on three sides)
- Mizoram

7. (b)

In News: Ukraine has recently intensified drone attacks on ports and refineries in Russia's Leningrad region located along the Baltic Sea.

Baltic Sea

- The Baltic Sea is an **arm of the North Atlantic Ocean**. It is bound by the **Scandinavian Peninsula**, the mainland of Northern Europe, Eastern Europe and Central Europe, and the Danish islands.
- **Surrounded by countries:** Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland and Sweden.
- It is connected to St. Petersburg by the Gulf of Finland.



8. (b)

Statement 1 is correct: Qeshm is the largest island in the Persian Gulf.

Statement 2 is not correct: Qeshm is separated from the Iranian mainland by the **Khuran Strait** not the Strait of Hormuz. The Strait of Hormuz lies in the vicinity but is a distinct and separate waterway connecting the Persian Gulf to the Gulf of Oman.



9. (c)

Context

- Scientists have discovered **India's first fossil record of gourami fish** from the Siwalik foothills in **Uttar Pradesh's Saharanpur district**.

About Siwalik Hills

- The Siwalik Hills (or Shivalik) are the **southernmost, youngest, and lowest outer** foothills of the Himalayan mountain system.
 - The range passes through **Pakistan, India (Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Uttarakhand), Nepal, and Bhutan**.
- **Geological Structure:** Known as the newest Himalayan range, formed **2–20 million years ago**, it is composed of **unconsolidated sediments, sandstone, clay, and conglomerate**, making it highly susceptible to erosion.
- **Landforms of Siwalik Hills:**
 - **Duns (Longitudinal Valleys):** These are flat-floored longitudinal valleys formed between the Siwalik Hills and the Lesser Himalayas due to tectonic and erosional processes. **Example:** Dehradun and Kotli Dun.
 - **Alluvial fans:** These are cone-shaped landforms formed when fast-flowing streams emerging from the hills lose velocity and deposit sediments such as sand, gravel, and silt at the foothills.

10. (c)

Context

- Comptroller and Auditor General of India (CAG) finds nearly half of Jammu and Kashmir's lakes have vanished since 1967, warns of ecological crisis.

Major Lakes of J&K, Ladakh UT

- **Dal Lake:** Famous freshwater lake known for houseboats, shikaras, and floating gardens (Raad).
- **Wular Lake:** Wular Lake is the largest freshwater lake in India and has been formed due to tectonic activity. It is fed by the Jhelum River and is recognized as a Ramsar site.
- **Pangong Tso:** It is a high-altitude brackish water lake extending into Tibet, known for its changing colors and strategic importance.
- **Tso Moriri:** It is another high-altitude brackish lake and a Ramsar site.
- **Manasbal Lake:** It is considered one of the deepest freshwater lakes in the region and the Mughal garden Jaroka Bagh, built by Nur Jahan, overlooks the lake.
- **Hokersar Wetland:** Often referred to as the "Queen of Wetlands".
- **Surinsar Lake and Mansar Lake:** They are twin lakes and are Ramsar sites.

11. (c)

Recent violent clashes between tribal villagers and police in Odisha's Rayagada district have drawn national attention to the **Sijimali bauxite mine project**.

About

- Sijimali is a high-grade bauxite reserve spanning 1,500 hectares across the Rayagada and Kalahandi districts of Odisha, situated within the **Eastern Ghats hill ranges**.
- It holds an estimated 311 million tonnes of bauxite ore and was handed over to Vedanta Limited through a government auction in 2023.
- The project has recently received conditional **Stage-1 forest clearance from the Central government**.

Key Facts

- The bauxite extracted from Sijimali is intended for **refining into alumina**, the primary raw material for aluminium production.
- **Odisha dominates India's bauxite sector**, accounting for 41% of national bauxite resources and approximately 73% of total bauxite production as of 2021-22.

12. (c)

Statement 1 is correct: The Southernmost Island is Great Nicobar whose **southernmost tip is only 150 km away from Sumatra, Indonesia.**

Statement 2 is not correct: The highest point is **Saddle Peak** in North Andaman (732 metre), **Mount Thullier** in Great Nicobar (642 metre).

- Saddle Peak (732 m) is in North Andaman, not Great Nicobar.

Statement 3 is correct: **Barren Island of the Andaman & Nicobar** Island group is the only confirmed active volcano not just in India but the whole of South Asia.

13. (c)

Statement 1 is correct: Mauritius is located in the south-west Indian Ocean, and it lies to the east of Madagascar.

Statement 2 is correct: Mauritius is part of the Mascarene Islands, a volcanic island group that also includes Réunion (France) and Rodrigues.

14. (b)

In News: Recent scientific studies highlight that the **Atlantic Meridional Overturning Circulation (AMOC)** is weakening and may approach a tipping point. Its potential collapse could trigger **major climatic, oceanic, and carbon cycle disruptions**, including additional global warming and regional climate extremes.

Statement 1 is correct

- AMOC transports warm water northward, influencing climate.

Statement 2 is not correct

- It is driven by **thermohaline circulation (temperature and salinity differences)**, not just winds.

Statement 3 is correct

- Freshwater reduces salinity, weakening deep water formation.

Statement 4 is correct

- AMOC moderates **European climate**, making it warmer than similar latitudes.

15. (b)

Statement 1 is correct: The Southwest Monsoon occurs from June to September and brings moisture-laden winds from the Indian Ocean. It accounts for the majority of India's rainfall. It is crucial for agriculture and water resources.

Statement 2 is not correct: The Northeast Monsoon mainly affects southeastern India, especially Tamil Nadu and coastal Andhra Pradesh. It does not primarily influence northwestern India.

Statement 3 is correct: El Niño and La Niña are phases of the El Niño Southern Oscillation (ENSO). This is a periodic warming and cooling cycle in the Pacific Ocean. It influences global climate patterns.

16. (a)

In News: Heatwaves affect **over 57% of districts**, including coastal and temperate zones, traditionally confined to northwestern and central regions. However, its impact is not uniform, giving rise to what scholars increasingly term **‘thermal injustice’**.

Statement 1 is correct: Heatwaves are **prolonged periods of abnormally high temperatures**, as compared to what is normally expected over a region. In India, Heat Waves occur **mainly from March to June** and in some rare cases even in July.

• **Temperature-Based Criteria:**

- **Plains:** $\geq 40^{\circ}\text{C}$
- **Hilly regions:** $\geq 30^{\circ}\text{C}$

- Must persist for **at least 2 consecutive days** in ≥ 2 stations of a region.

Statement 2 is correct: A ‘severe heatwave’ is declared when the departure from normal temperature exceeds 6.4°C .

Statement 3 is not correct: Heatwaves **can occur in coastal regions**, based on departure from normal and threshold ($\sim 37^{\circ}\text{C}$).

17. (d)

In News : A boat carrying about 280 Rohingya refugees and Bangladeshi nationals from Bangladesh to Malaysia capsized in the Andaman Sea due to bad weather and overcrowding.

Andaman Sea

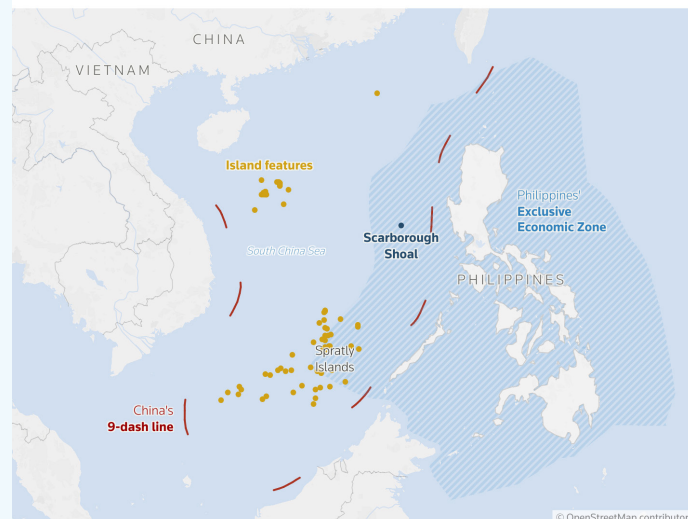
- The Andaman Sea is a marginal sea in the northeastern Indian Ocean.
- It is bordered by Myanmar to the north and east, Thailand and Malaysia to the east, Indonesia to the south, and India’s Andaman and Nicobar Islands to the west.
- It connects to the South China Sea through the Strait of Malacca and serves as an important international shipping route, especially between India and China.
- It also supports regional maritime trade through ports in Myanmar and surrounding countries.

18. (b)

Scarborough Shoal is situated in the eastern part of the South China Sea, approximately 120 nautical miles west of the Philippine island of Luzon.

Scarborough Shoal in the South China Sea

Scarborough Shoal has long been a flashpoint in the dispute between Beijing and Manila over sovereignty and fishing access. China claims almost the entire South China Sea via a "nine-dash line" on its maps, which cuts into parts of the Exclusive Economic Zones of Brunei, Indonesia, Malaysia, the Philippines and Vietnam.



Sources: Asia Maritime Transparency Initiative, Center for Strategic and International Studies; marineregions.org | Vijdan Mohammad Kawoosa and Arathy J Aluckat

19. (c)

In News: Villages near the Ghaggar River report rising cancer cases linked to polluted water, but lack of data and poor healthcare hinder action.

Ghaggar River in northern India

- The Ghaggar River is an intermittent, monsoon-fed river in northern India.
- It originates in the village of Dagshai in the Shivalik Hills of Himachal Pradesh at about 1,927 metres elevation and flows through **Punjab and Haryana into Rajasthan**.
- Its main tributaries include the Kaushalya, **Markanda, Sarsuti**, Tangri, and Chautang rivers.

20. (c)

Context: A recent study shows that consecutive droughts in **2023–2024 pushed Amazon rainforest moisture** and biomass to their lowest levels in over three decades, indicating severe ecological stress.

About Amazon Rainforest

- The Amazon Rainforest lies within the **Amazon River Basin**.
- The Amazon River is the **world's largest river by discharge volume** and the second-longest river globally, after the Nile. It originates in the Peruvian Andes and drains into the Atlantic Ocean.
 - **Major Tributaries:** Rio Negro, Madeira, and Xingu
 - **Watershed Coverage:** Brazil, Peru, Ecuador, Colombia, Venezuela, and Bolivia.

21. (d)

The Colorado River is one of the principal rivers in the Southwestern United States and northern Mexico. It flows primarily southwest through the Colorado Plateau and the Grand Canyon before reaching the Gulf of California (also known as the Sea of Cortez).

22. (b)

Context: After protests by conservation groups, the Meghalaya government dropped the proposed luxury resort project on Lumpondeng Island.

About

- Lumpondeng Island is located in **Umiam Lake**, a manmade reservoir formed in the early 1960s by damming the Umiam River for a hydroelectric project, about 20 km from Shillong.
- The island is characterised by coniferous vegetation and lies near the centre of the lake.

23. (a)

In News: Alarming levels of arsenic contamination have been detected in the Salween River.

About the River

- The Salween is one of Asia's great rivers known by different names across the countries it flows through: Nu in China, Thanlwin in Myanmar.
- It is the second longest river in Southeast Asia after the Mekong, and the longest free-flowing river without a dam in Southeast Asia.
- The river originates from the Tanggula (Tangula) Mountains on the Tibetan Plateau.

24. (b)

Statement 1 is correct: Bauxite is the principal ore used for aluminium production. A large proportion of it is refined into alumina.

Statement 2 is correct: Bauxite forms under tropical and subtropical climatic conditions due to intense weathering and leaching of silica. This leaves behind aluminium-rich minerals.

Statement 3 is incorrect: India is not the largest producer of bauxite globally. Countries like Australia and Guinea dominate global production.

25. (a)

In News: Recently, the **11th India–Egypt Joint Defence Committee (JDC)** meeting was held in Cairo. It marked a significant step in strengthening bilateral defence ties under the **Strategic Partnership (2023)** and **MoU on Defence Cooperation (2022)**.

- Egypt shares land borders with **Libya (West), Sudan (South), and Israel (Northeast)**
- It also borders the **Gaza Strip (Palestinian territory)**, but **not Jordan**, as it is separated by Israel and the Gulf of Aqaba.

26. (b)

Context: Defence Minister Rajnath Singh held bilateral talks with his German counterpart Boris Pistorius in Berlin, aimed at strengthening the strategic defence partnership between India and Germany.

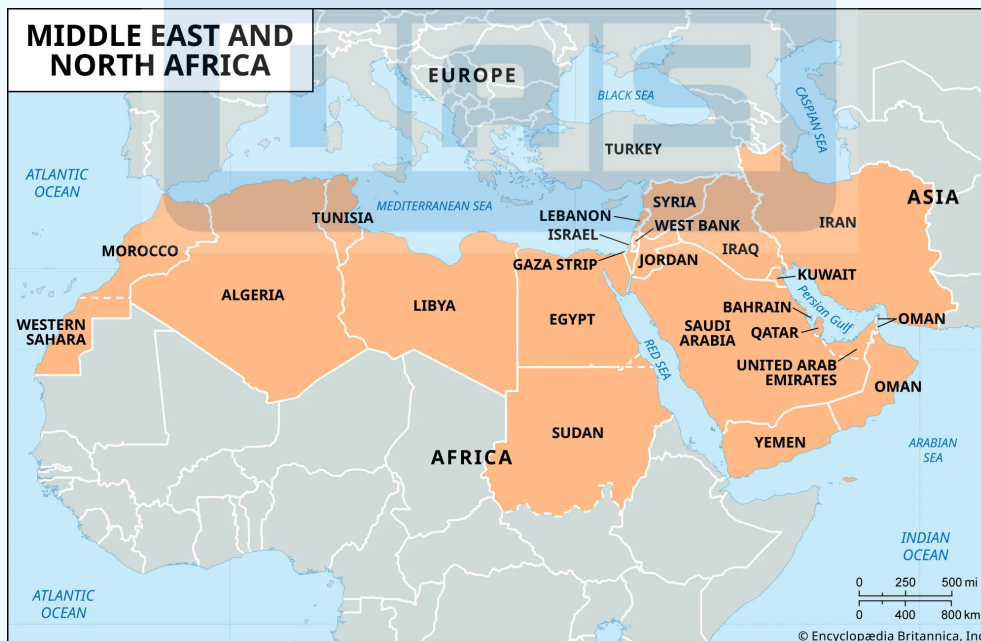
About

- Germany shares borders with nine countries: **Denmark** in the north, **Poland** and the Czech Republic in the east, Switzerland and Austria in the south, **France** in the southwest and Belgium, Luxembourg and the **Netherlands** in the west.

27. (d)

All three statements are correct: MENA stands for the **Middle East and Northern Africa**, referring to the countries between Iran in the East and Tunisia and Morocco in the West.

- It is pivotal due to its **vast oil and natural gas reserves**, holding more than half of the world’s oil reserves and two-fifths of its natural gas reserves.
- This makes MENA a **crucial player in the energy markets** and offers significant investment opportunities, particularly in the oil and natural gas sectors.



28. (a)

- **Statement 1 and 2 are correct:** Chabahar Port, located on the southeastern Makran coast of Iran, is the **only Iranian port with direct access to the Indian Ocean**.
 - The Chabahar Port is situated in southeastern Iran on the Makran coast, **east of the Strait of Hormuz in the Gulf of Oman**.

- **Statement 3 is not correct: Geopolitical Significance:** It is strategically located at the **crossroads of South Asia, Central Asia, and the Middle East**. It provides India with direct sea access to Afghanistan and Central Asia, bypassing Pakistan.

29. (c)

Statement 1 is not correct: Luzon Island is the largest and most important island of the Philippines.

- It is located on the **northern part of the Philippine archipelago**.

Statement 2 is correct: It is bounded by the Philippine Sea (east), Sibuyan Sea (south), and the South China Sea (west).

- To the north, the **Luzon Strait separates Luzon from Taiwan**.



Statement 3 is not correct: It is a part of the **Pacific Ring of Fire**, making it prone to earthquakes & volcanoes.

30. (d)

All three statements are correct: Atacama desert is located in Chile stretching into parts of Peru, Bolivia, and Argentina, it is considered the driest non-polar desert on the earth.

- It lies between the **Pacific Ocean (west) and the Andes Mountains (east)**.
- There are more than 300 clear nights per year, meaning no clouds and no rain.



- **Scientific Significance:** A rare combination of dry climate, high altitude, and isolation from urban light pollution makes the Atacama home to the **world's largest ground-based astronomical projects**.
 - Every year, the Atacama Desert draws thousands of scientists **to investigate the origins of the universe**.

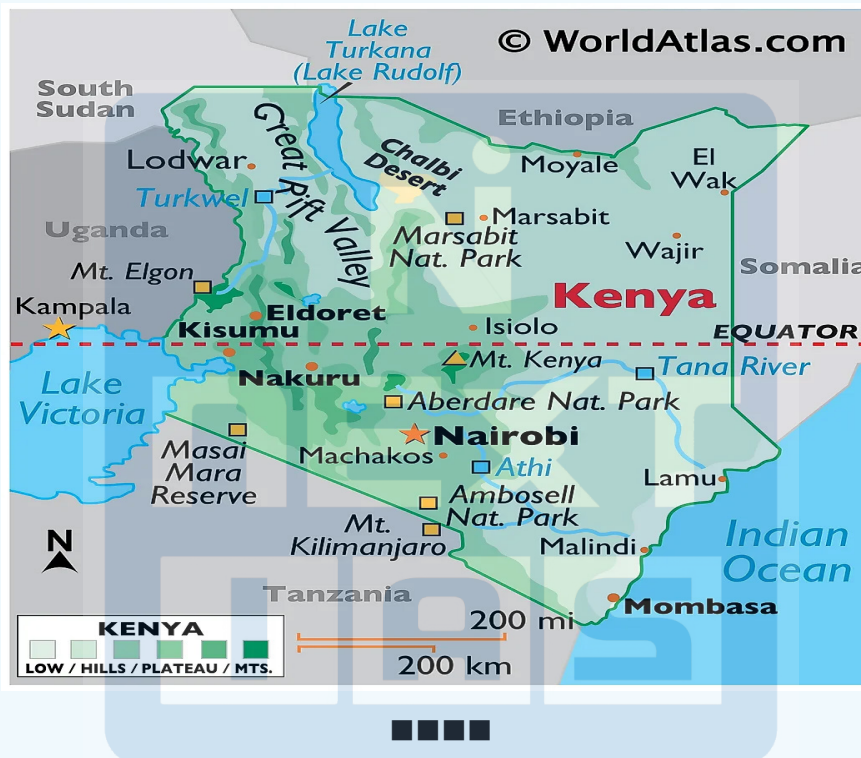
31. (d)

Context

- The 10th India–Kenya Joint Trade Committee (JTC) meeting was held in Nairobi to review and deepen bilateral trade and economic cooperation between India and Kenya.

About Kenya

- **Location:** Kenya is located in **East Africa along the Equator**.
 - It is bordered by **Tanzania, Uganda, South Sudan, Ethiopia, Somalia, and the Indian Ocean**.
- **Capital:** Nairobi
- **Major physical features:**
 - **The Great Rift Valley** passes through the country.
 - **Mount Kenya:** Second highest peak in Africa.
 - **Lake Victoria:** World’s second-largest freshwater lake (shared with Uganda and Tanzania).



GOVERNMENT SCHEMES/ INITIATIVES

1. Consider the following statements regarding IN-SPACe:

1. It was created to facilitate private sector participation in India's space sector.
2. It functions as an autonomous agency under the Department of Space.
3. It acts as a single-window agency to authorise space activities of Non-Governmental Entities.

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All three (d) None

2. With reference to the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G), consider the following statements:

1. The funding pattern between the Centre and the States is uniform at 50:50 across all regions.
2. The Ministry of Rural Development (MoRD) is the Nodal Ministry.

Which of the statements given above is/are correct?

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

3. With reference to the Multi-Hazard Early Warning Decision Support System (MHEW-DSS), consider the following statements:

1. It is an indigenously developed system by the India Meteorological Department.
2. It integrates real-time data from satellites, radars, and ground-based sensors into a GIS-enabled platform.
3. It was developed under Mission Shakti to enhance disaster preparedness.

Which of the statements given above are correct?

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

4. With reference to Yuva Sangam, consider the following statements:

1. It is implemented under the Ek Bharat Shreshtha Bharat (EBSB) programme.
2. It was conceptualised by the Ministry of Youth Affairs and Sports as a standalone initiative.

Which of the statements given above is/are correct?

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

10. Project Glasswing, recently seen in the news, is related to:
- (a) Defensive cybersecurity initiative (b) Critical minerals exploration
(c) Renewable energy transition (d) Space-based surveillance system
11. Consider the following statements regarding the River Basin Management (RBM) Scheme:
1. It is a Central Sector initiative under the Ministry of Jal Shakti, approved for the 16th Finance Commission period with an outlay of ₹2,183 crore.
 2. The National Water Development Agency (NWDA) is responsible for flood control and erosion management in the North Eastern Region under the scheme.
 3. The Ganga–Brahmaputra–Meghna basin accounts for over 43% of the total catchment area of India's major rivers.

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

12. With reference to the Bharat Maritime Insurance Pool (BMI Pool), consider the following statements:
1. It provides insurance coverage only for cargo transported within Indian territorial waters.
 2. It is the first state-backed maritime insurance framework in the world.

Which of the statements given above is/are correct?

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

13. With reference to the Pradhan Mantri Gram Sadak Yojana, consider the following statements:
1. It is a Centrally Sponsored Scheme implemented by the Ministry of Rural Development.
 2. Launched in 2015, the scheme aims to provide all-weather road connectivity to unconnected rural habitations.

Which of the statements given above is/are correct?

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

14. Consider the following statements regarding the Vishwa Sutra collection:
1. It was initiated by the Office of the Development Commissioner (Handlooms) under the Ministry of Textiles in collaboration with NIFT.
 2. The collection pairs 30 state-specific Indian handloom weaves with design inspirations drawn from 30 different countries.
 3. The Kanchipuram weave in the collection has been reinterpreted with Spanish design influences.

Which of the statements given above are correct?

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

15. With reference to fertiliser subsidy reforms in India, consider the following statements:
1. The Nutrient-Based Subsidy (NBS) scheme covers all fertilisers including urea.
 2. Under the Direct Benefit Transfer (DBT) system for fertilisers, subsidy is directly transferred to farmers' bank accounts.
 3. Neem-coated urea helps reduce diversion of subsidised fertilisers for non-agricultural uses.

Which of the statements given above is/are **not** correct?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
16. Consider the following statements regarding the Samridh Gram Initiative:
1. It is an initiative of the Department of Telecommunications.
 2. It follows a 'phygital' model of service delivery.
 3. Services such as telemedicine, smart classrooms, agricultural advisory and defence-related training are provided under the Initiative.

Which of the statements given above are correct?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
17. With reference to the Production Linked Incentive Scheme for Food Processing Industry, consider the following statements:
1. It provides incentives linked to incremental sales to boost production and exports.
 2. It includes a dedicated component for millet-based products.
 3. It restricts participation only to large-scale food processing industries to achieve economies of scale.

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All three (d) None
18. With reference to the SMILE Scheme, consider the following statements:
1. It was launched in 2022 by the Ministry of Home Affairs.
 2. It aims to rehabilitate persons engaged in begging with their consent.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
19. With reference to the Atal Pension Yojana, which of the following statements is/are correct?
1. The scheme is administered by the Pension Fund Regulatory and Development Authority (PFRDA).
 2. It guaranteed monthly pension ranging from ₹1,000 to ₹5,000 for subscribers after attaining 60 years of age.

Select the correct answer using the code given below:

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

20. The primary objective of the NAMASTE Scheme is:
- Construction of new sewage treatment plants in urban areas
 - Elimination of hazardous manual cleaning of sewers and septic tanks through mechanisation
 - Provision of housing to urban sanitation workers
 - Training sanitation workers in digital financial literacy
21. Consider the following statements about the SEED Scheme:
- It provides free coaching for competitive examinations to DNT candidates.
 - It is applicable only to communities listed under SC/ST categories.
 - The income eligibility ceiling is ₹2.50 lakh per annum from all sources.
- Which of the above is/are correct?
- 1 and 3 only
 - 2 and 3 only
 - 1 only
 - 1, 2, and 3
22. Consider the following statements regarding the Sahyog Portal:
- It is a centralized platform operated by the Ministry of Electronics and Information Technology.
 - It enables law enforcement agencies to issue notices for removal of unlawful online content.
 - It was initially conceived as an emergency tool during the pandemic.
- Which of the statements given above are correct?
- 2 and 3 only
 - 1 and 2 only
 - 1 and 3 only
 - 1, 2 and 3
23. Consider the following statements regarding the SARPA App:
- It is a platform developed by the State Forest Department.
 - The App provides real-time information on antivenom availability across hospitals.
 - It enables remote medical guidance by doctors to assist responders.
 - SARPA App is designed for regulating wildlife trade involving reptiles.
- How many of the statements given above are correct?
- Only one
 - Only two
 - Only three
 - All four
24. Which of the following statements is correct about the E-PRAAPTI portal?
- It is a GST filing portal which streamline tax filing and compliance management.
 - It is a telemedicine platform which connects patients with doctors and specialists.
 - It is a centralized system which issues notices for removing illegal online content .
 - It is an Aadhaar-based portal which tracks and activates inoperative EPF accounts.

EXPLANATIONS

1. (c)

Statement 1 is correct: IN-SPACE was created to enable and promote private sector participation in India's space activities. This became important after the government opened up the space sector in June 2020.

Statement 2 is correct: It functions as an **autonomous agency under the Department of Space (DoS)**. This gives it an institutional role in coordinating between government and private entities.

Statement 3 is correct: IN-SPACe acts as a **single-window nodal agency for promoting, enabling, authorising, and supervising** space activities of **Non-Governmental Entities (NGEs)**. This includes support for launch vehicles, satellites, and access to ISRO/DoS infrastructure.

2. (b)

In News: PMAY-G completes 10 years of implementation in 2026, marking a decade of India’s flagship rural housing mission.

What is PMAY-G?

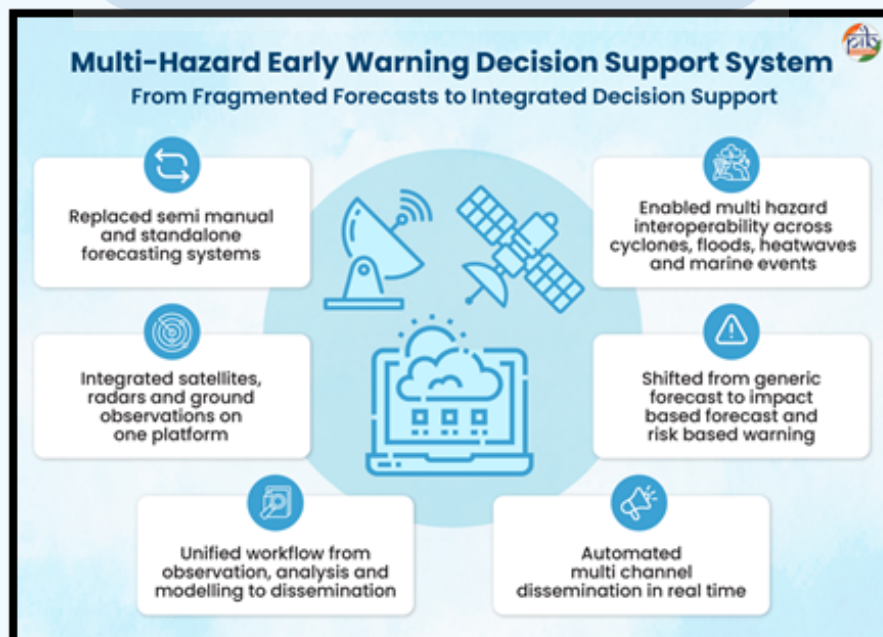
- **Aim:** Provide “Housing for All” in rural areas — financial assistance to eligible rural households, including houseless families and those living in zero, one, or two-room kutcha houses, to construct pucca homes with basic amenities.
- **Beneficiary Selection:** Using housing deprivation parameters from the Socio-Economic and Caste Census (SECC), 2011, verified by Gram Sabhas.
- **Funding Pattern:** 60:40 (Centre:State) in plain areas; 90:10 for North-Eastern and Himalayan states.
- **Nodal Ministry:** Ministry of Rural Development (MoRD).
- **Financial Assistance:**
 - Minimum unit size of 25 sq. m.
 - ₹1.20 lakh in plain areas; ₹1.30 lakh in hilly/North-Eastern states.
 - Additional ₹12,000 for toilet construction via convergence with Swachh Bharat Mission.

3. (a)

Context: The India Meteorological Department (IMD) received the National Award for e-Governance 2025 for its indigenously developed Multi-Hazard Early Warning Decision Support System (MHEW-DSS).

What is MHEW-DSS?

- **Launched in 2024**, it is a digital platform that automates decision-making in critical weather forecasting processes and provides forecast and warning services to the public, government, and non-government agencies, as well as specific stakeholders.



- Developed under **Mission Mausam**, the system has automated 90% of weather data processing and improved forecast accuracy by 30%, while reducing preparation time from six hours to three.
- It integrates real-time data from satellites, radars, and ground and upper air-based sensors into a centralized GIS-enabled platform, replacing outdated manual workflows.

4. (a)

Context: Registrations for institution-led exposure tours under Yuva Sangam Phase-VI were held, covering 22 States and Union Territories.

About the Yuva Sangam

- It is an initiative by the Government of India to strengthen people-to-people connect between youth belonging to different States/UTs of India.
 - It was conceptualised by the Ministry of Education in collaboration with various other ministries and departments, and was launched under the banner of Ek Bharat Shreshtha Bharat (EBSB).
 - Ek Bharat Shreshtha Bharat (EBSB) launched on 31st October 2015 to strengthen national unity by deepening connections between States and Union Territories.
- It has been organised collaboratively on the model of Kashi Tamil Sangamam (KTS).

5. (c)

Both the statements are correct: The **Namo Drone Didi scheme** is a ₹1,261 crore central initiative (2023-24 to 2025-26) providing drones to **15,000 women-led Self-Help Groups (SHGs) under the DAY-NRLM mission.**

- It **empowers rural women** as certified drone pilots to offer affordable, precise, and efficient spraying services for pesticides and fertilizers to farmers, improving crop yields and generating new income.
- The **15-day training for SHG members** (5 days drone pilot training and 10 days nutrient and pesticide application training) is provided under the scheme.

6. (c)

Statement 1 is correct: Launched: In 2015.

- **Aim:** To support small-scale business ventures for non-corporate and non-farm income-generating activities.

Statement 2 is not correct: These loans are given by **Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs.**

Statement 3 is correct: Under the aegis of PMMY, MUDRA has created four products namely:

- **Shishu:** Covering loans upto Rs. 50,000/-.
- **Kishor:** Covering loans above Rs. 50,000/- and up to Rs. 5 lakhs.
- **Tarun:** Covering loans above Rs.5 lakh and upto Rs.10 lakhs.
- **TarunPlus:** Covering loans above Rs.10lakh and upto Rs.20 lakhs.

7. (b)

Context: The “Soil Sakhis” initiative in drought-prone districts of western Maharashtra is empowering women while improving soil health and agricultural productivity.

About the Initiative

- Launched in **2023** under the **Mann Deshi Foundation’s Agriculture and Climate Action Programme.**

- Trains rural women as “Soil Sakhis” to promote **soil testing and scientific farming practices**.
- Implemented in **Satara, Sangli, Solapur, Kolhapur, and Pune** districts.

Key Features

- Soil Sakhis collect samples and facilitate **soil testing through laboratories**.
- Farmers receive **actionable reports** for improved crop and nutrient management.
- Soil Sakhis earn about **₹8,000–₹10,000 per month** (excluding petrol allowance).

8. (c)

About Jal Jeevan Mission (JJM)

- **Type:** Centrally Sponsored Scheme.
- **Nodal Ministry:** Department of Drinking Water & Sanitation (DDWS), under the Ministry of Jal Shakti.
- **Background:** The National Rural Drinking Water Programme (NRDWP) was restructured and subsumed into JJM.
- **Objective:** To ensure **Functional Household Tap Connection (FHTC)** to every rural household with **55 litres per capita per day (lpcd)** of potable drinking water.
- **Coverage and Extension**
 - Launched in **August 2019** with the aim of achieving **100% rural tap water coverage by 2024**. However, the programme reached about **81% coverage**, leading to its **extension till 2028** under **JJM 2.0**.
- **Progress:** Tap water access in rural India has expanded rapidly, rising from 3.23 crore households (16.7%) to an additional 12.48 crore households connected since then.
- **Funding Pattern:** 90:10 for Himalayan and North-Eastern States, 100% for Union Territories and 50:50 – Other States.

9. (c)

In News: Recently, the **Union Minister of Housing and Urban Affairs (MoHUA)** launched the operational guidelines for the **Urban Challenge Fund (UCF)** programme to strengthen the **financial capacity of Urban Local Bodies (ULBs)**.

Statement 1 is correct: UCF is a **Centrally Sponsored Scheme** of the Ministry of Housing and Urban Affairs (MoHUA).

Statement 2 is not correct: It **does not provide 100% Central funding**. Only **25% Central Assistance** is provided, with at least **50% to be mobilised through market financing**.

Statement 3 is correct: The scheme explicitly promotes **bankable, market-linked urban infrastructure projects**.

10. (a)

Context: Anthropic has announced Mythos, its most advanced AI model, so powerful at detecting cybersecurity vulnerabilities that it will not be released publicly.

About Mythos

- Developed by Anthropic, creators of the **Claude LLM family**.
- Builds on earlier models like **Opus**, which detected bugs missed by human reviewers.
- Focuses specifically on **cybersecurity and vulnerability detection**, beyond general coding tasks.
- Capable of identifying **previously undetected bugs in legacy software systems**.
- Access restricted to a **consortium of 40+ companies**.

Do you know?

- **Project Glasswing** is a defensive cybersecurity initiative by Anthropic, in partnership with Microsoft, Apple, and Cisco, aimed at identifying and patching vulnerabilities before malicious exploitation.

11. (b)

Statement 1 is Correct: The River Basin Management (RBM) Scheme is a Central Sector Scheme under the Ministry of Jal Shakti, with an approved outlay of about ₹2,183 crore for the current Finance Commission cycle. It focuses on integrated river basin planning and management.

Statement 2 is not correct: The National Water Development Agency primarily works on inter-basin water transfer and water resources planning. Flood control and erosion management in the North Eastern Region are handled under separate schemes/programmes, not directly by NWDA under RBM.

Statement 3 is correct: The Ganga–Brahmaputra–Meghna basin is the largest river basin system in India and accounts for over 40% (around 43%) of the total catchment area of major rivers, making it hydrologically and economically crucial.

12. (d)

Context: The Union Cabinet has approved the creation of a ‘Bharat Maritime Insurance Pool’ (BMI pool) with a sovereign guarantee of ₹12,980 crore to strengthen India’s maritime trade resilience.

About

- The BMI Pool is a **domestic insurance mechanism** providing comprehensive coverage across key segments such as hull and machinery, cargo, protection and indemnity (P&I), and war risk.
- It covers **Indian-flagged and Indian-controlled vessels**, including those operating in conflict-prone **international waters**, and extends protection to cargo movement between India and global ports.
- It is aligned with **Maritime India Vision 2030** and supports India’s ambition of becoming a leading maritime nation by 2047.
- Similar state-backed frameworks exist in countries such as the **United Kingdom, Japan, and South Korea**.

13. (a)

Context: The Union Cabinet has extended the Pradhan Mantri Gram Sadak Yojana-III (PMGSY-III) beyond March 2025 till 2028–29, increasing the outlay by ₹3,727 crore to ₹83,977 crore.

About PMGSY

- The Pradhan Mantri Gram Sadak Yojana (**PMGSY**) is a 100% **Centrally Sponsored Scheme**, under the **Ministry of Rural Development**, aimed at providing all-weather road connectivity to unconnected habitations in rural areas as part of a broader poverty reduction strategy.
- **Launched in 2000**, the PMGSY has evolved through multiple phases:
 - **PMGSY-I (2000)** focused on providing connectivity to unconnected habitations;
 - **PMGSY-II (2013)** aimed at upgradation of existing rural roads;
 - After these two phases, another component of the PMGSY—Road Connectivity Project for Left Wing Extremism Affected Areas (RCPLWEA)—was launched in 2016 for constructing rural roads in the LWE areas;

- **PMGSY-III (2019)** focuses on consolidation of rural road networks;
- and **PMGSY-IV (2024–25 to 2028–29)** aims to provide connectivity to about 25,000 newly eligible habitations due to population growth.

14. (d)

Statement 1 is correct: The Vishwa Sutra (meaning “Universal Thread”) is a unique design initiative launched by the Ministry of Textiles, specifically through the Office of the Development Commissioner (Handlooms). To execute the project, the government collaborated with the National Institute of Fashion Technology (NIFT) to leverage their expertise in design innovation and global fashion trends.

Statement 2 is correct: The core objective of the collection is to demonstrate the global versatility of Indian handlooms. It features 30 distinct handloom weaves representing various Indian states. Each of these 30 Indian textiles is paired with a specific design inspiration, color palette, or motif from 30 different countries. This “Global-Local” fusion aims to make traditional Indian fabrics more appealing to international markets and contemporary designers.

Statement 3 is correct: Within the collection, specific pairings were curated to showcase stylistic synergy. The Kanchipuram silk from Tamil Nadu, known for its heavy gold zari and traditional temple borders, was reinterpreted using design elements inspired by Spain.



15. (a)

In News: Recent trends in India’s fertilizer subsidy, particularly of urea, has led to **nutrient imbalance, fiscal stress, and environmental degradation**, calling for urgent reforms in subsidy design and delivery, rather than optimal agricultural outcomes.

Statement 1 is not correct

- Nutrient-Based Subsidy (NBS) applies only to **P & K fertilisers**, not urea (major reform gap).

Statement 2 is not correct: In Direct Benefit Transfer (DBT) (fertiliser), subsidy is **paid to companies after sale, not directly to farmers.**

Statement 3 is correct: Neem coating reduces **diversion and improves nitrogen-use efficiency.**

16. (a)

Statement 1 is correct: The Samriddh Gram Initiative is an initiative of the Department of Telecommunications under the Ministry of Communications. It is part of efforts to expand digital infrastructure in rural areas.

Statement 2 is correct: The initiative follows a ‘phygital’ model, combining physical infrastructure with digital platforms. This improves access and delivery of services in rural areas.

Statement 3 is not correct: The initiative provides services such as telemedicine, education, and agricultural advisory. However, defence-related training is not included under the scope of the Initiative.

17. (b)

Statement 1 is correct: The scheme provides incentives based on incremental sales. It aims to promote production, exports, and global branding. This is its core design feature.

Statement 2 is correct: A dedicated component promotes millet-based products. This supports diversification and aligns with nutrition-focused initiatives. It also encourages value addition.

Statement 3 is not correct: The scheme includes MSMEs under a separate category. It promotes innovation among smaller enterprises as well. Hence, it is not restricted to large industries.

18. (b)

Context: The SMILE Scheme is transforming lives across India by promoting inclusive rehabilitation and social reintegration of vulnerable communities.

About

- Launched in **2022**, the Support for Marginalised Individuals for Livelihood and Enterprise (SMILE) is implemented by the **Union Ministry of Social Justice and Empowerment**.
- It is **India's first unified national framework** designed to support vulnerable groups at every stage, from identification and rescue to healthcare, rehabilitation, education, counselling, skill development, and long-term economic independence.
- **Key Components:**
 - One of its components was the sub-scheme to **identify, profile, and rehabilitate individuals** engaged in the act of begging with their consent.
 - The other component of the scheme is for the **empowerment of transgender persons**.
- **Objectives:** Make religious, tourist, and historical urban spaces “beggary-free”.
- **Progress:** As of January 2026, a total of 30,257 individuals have been identified as engaged in the act of begging, and 8,129 individuals have been rehabilitated in different cities.

19. (c)

Context

- The Atal Pension Yojana (APY), has achieved a historic milestone by surpassing total gross enrolments of “**9 crore**” subscribers on 21st April, 2026.

Atal Pension Yojana

- It is a flagship social security scheme of the Government of India, administered by the **Pension Fund Regulatory and Development Authority (PFRDA)**.
- The scheme, launched in **2015**, is a voluntary, contributory pension scheme primarily focused on the **poor, the underprivileged, and workers in the unorganized sector**.
- It is open to all Indian citizens between the age of **18 and 40 years**, except those who are or have been income tax payers.
- It guaranteed monthly pension ranging from **₹1,000 to ₹5,000** for subscribers after attaining **60 years of age**.

20. (b)

The National Action for Mechanised Sanitation Ecosystem (NAMASTE) Scheme is a central sector scheme aimed at eliminating hazardous manual cleaning of sewers and septic tanks by promoting mechanised sanitation. It was launched by the Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs. It focuses on ensuring dignity, occupational safety, and sustainable livelihoods for sanitation workers while replacing manual scavenging with technology-driven sanitation systems.

21. (a)

Statement 1 is correct: SEED provides free, good-quality coaching for competitive examinations to Denotified, Nomadic and Semi-Nomadic Tribes (DNTs) as one of its four core components, along with health insurance, housing assistance, and livelihood support at the community level.

Statement 2 is not correct: SEED specifically targets DNT families not already covered under SC/ST/OBC schemes also it fills the welfare gap for the uncategorised DNTs who fall through existing reservation frameworks. Restricting it to SC/ST would defeat the scheme's entire purpose.

Statement 3 is correct: The income ceiling is ₹2.50 lakh per annum from all sources — a standard means-test threshold used across several Social Justice Ministry schemes.

22. (a)

Statement 1 is incorrect: The portal is operated by the Indian Cyber Crime Coordination Centre (I4C) under the Ministry of Home Affairs. It is not under the Ministry of Electronics and IT.

- **Statement 2 is correct:** It provides a single-window interface for law enforcement agencies to issue notices for removal or blocking of unlawful content. This improves coordination and speed.
- **Statement 3 is correct:** The portal was originally conceived as an emergency tool during the pandemic. It was later repurposed into a broader regulatory mechanism.

23. (c)

- **Statement 1 is correct:** SARPA is a Kerala Forest Department platform launched to coordinate snake rescues and reporting. It connects users with trained responders and hospitals.
- **Statement 2 is correct:** The app provides real-time data on antivenom availability across hospitals. This improves timely treatment during emergencies.
- **Statement 3 is correct:** The upgraded version integrates doctors who can guide responders remotely. This ensures immediate medical assistance before hospitalisation.
- **Statement 4 is incorrect:** The app is focused on snakebite management and rescue operations. It is not meant for regulating wildlife trade.

24. (d)

In News : The Employees' Provident Fund Organisation (EPFO) is launching a new portal called E-PRAAPTI to help resolve long-pending issues of unclaimed EPF deposits.

'Employee Provident Fund Aadhaar-Based Access (E-PRAAPTI) Portal is a dedicated digital platform to facilitate identification, tracking, Unique Account Number (UAN) linking, and activation of old EPF accounts.

- It will use Aadhaar-based authentication to allow users to securely access old EPF accounts, even those not linked to a UAN, and help them update details, link UANs, and activate accounts.
- In its initial phase, access will be based on member IDs, benefiting users who still have those details, and later it will be expanded to those who cannot recall their old IDs.



DEFENSE/ INTERNAL SECURITY

1. Exercise Dweep Shakti, recently seen in the news, is primarily aimed at:
 - (a) Enhancing cyber warfare capabilities through integrated digital and network operations
 - (b) Testing nuclear deterrence strategies through simulated strategic response scenarios
 - (c) Strengthening coastal and island defence through joint operations
 - (d) Conducting humanitarian assistance and disaster relief operations during emergencies
2. The E-3 Sentry, recently seen in news, is best described as:
 - (a) Airborne early warning and control aircraft
 - (b) Stealth fighter jet
 - (c) Ballistic missile system
 - (d) Satellite communication platform
3. Consider the following statements regarding INS Aridhaman:
 1. It is India's third indigenously built nuclear-powered ballistic missile submarine.
 2. It belongs to the Arihant-class submarines.
 3. INS Arighaat was commissioned before INS Arihant.

How many of the statements given above are correct?

(a) Only one	(b) Only two
(c) All three	(d) None
4. With reference to the Naxalite Movement in India, which of the following statements is/are correct?
 1. It originated in 1967 in West Bengal primarily as a movement advocating the rights of industrial workers in urban areas.
 2. It was led by leaders such as Charu Majumdar and Kanu Sanyal.

Select the correct answer using the code given below:

(a) 1 only	(b) 2 only
(c) Both 1 and 2	(d) Neither 1 nor 2
5. Exercise Cyclone-IV, recently seen in the news, is a joint military exercise conducted between India and which of the following countries?
 - (a) France
 - (b) United Arab Emirates
 - (c) Israel
 - (d) Egypt
6. Exercise DUSTLIK, recently in the news, is a joint military exercise between India and which of the following countries?

- (a) Kazakhstan (b) Uzbekistan
(c) Kyrgyzstan (d) Turkmenistan

7. India–Sri Lanka Diving Exercise (DIVEX) is primarily aimed at:

- (a) Anti-piracy operations in the Indian Ocean
(b) Underwater operations and submarine rescue training
(c) Joint air combat exercises
(d) Coastal surveillance and radar integration

8. Exercise Cyclone is a joint military exercise conducted between India and which of the following countries?

- (a) Egypt (b) Saudi Arabia
(c) United Arab Emirates (d) Oman

9. With reference to the Stockholm International Peace Research Institute (SIPRI), consider the following statements:

1. It was established by the Swedish Parliament and is based in Stockholm, Sweden.
2. It is a United Nations body working on global peace and security.

Which of the statements given above is/are correct?

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

10. Consider the following statements regarding the Vikram VT-21 platform:

1. It has been developed by the Defence Research and Development Organisation (DRDO).
2. It has amphibious capability enabling it to cross water bodies.
3. It uses first-generation anti-tank guided missiles for enhanced firepower.

Which of the statements given above are correct?

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

EXPLANATIONS

1. (c)

Context: Exercise Dweep Shakti marks a significant step in India's evolving military doctrine, emphasising jointness and multi-domain operations across its armed forces.

About

- Conducted under the Andaman and Nicobar Command, the drill brought together the Army, Navy, and Air Force in a fully integrated operational scenario focused on **coastal and island defence**.

2. (a)

Context

- Iran's missile and drone strike on Saudi Arabia's **Prince Sultan Air Base** has reportedly destroyed a **US E-3 Sentry AWACS aircraft**.

About E-3 Sentry (AWACS)

- The E-3 Sentry is an **airborne early warning and control aircraft** developed by Boeing for advanced surveillance and battle management.
- The aircraft is commonly known as AWACS, which stands for **Airborne Warning and Control System**.
- It is equipped with a **distinctive rotating radar dome** mounted above its fuselage that enables long-range detection and tracking of aerial targets.

3. (b)

Statement 1 is correct: INS Aridhaman is India's third indigenously built SSBN (nuclear-powered ballistic missile submarine). This strengthens India's sea-based nuclear deterrence capability.

Statement 2 is correct: It belongs to the Arihant-class of submarines. It is also referred to as S4 under India's strategic submarine programme.

Statement 3 is incorrect: INS Arihant was commissioned in 2016, while INS Arighaat was commissioned in 2024. Therefore, Arihant came earlier, not Arighaat.

4. (b)**Context**

- The Ministry of Home Affairs has revised the classification of districts affected by Left-Wing Extremism (LWE), replacing the earlier category of "most affected districts" with a new three-tier categorization.

What is the Naxalite Movement?

- Left Wing Extremism (LWE), often referred to as Naxalism, is one of India's most serious internal security challenges.
- Origin: The Naxalite movement began in 1967 in Naxalbari, West Bengal, as a radical leftist uprising championing the rights of tribal and landless communities.
 - It was led by **Charu Majumdar, Kanu Sanyal and Jagan Santhal**.
- Geographic Spread: The insurgency spread across the Red Corridor, covering parts of Chhattisgarh, Jharkhand, Odisha, Maharashtra, West Bengal, Andhra Pradesh, Telangana, Madhya Pradesh, and Kerala.
- Approach adopted: Naxalites employ guerrilla warfare, target state institutions, extort local populations, and often recruit children.
 - They claim to fight for marginalized communities but resort to violent methods.

5. (d)

In Context: The Indian Army is participating in the 4th edition of Exercise Cyclone-IV in Egypt.

About

- Started in **2023**, it is a bilateral India-Egypt joint Special Forces military exercise.
- It will provide an opportunity for mutual exchange of professional expertise, strengthen camaraderie, and deepen understanding of each other's military traditions and cultures.

6. (b)

Context: An Indian Army contingent has departed for the India-Uzbekistan Joint Military Exercise DUSTLIK.

About

- The aim of Exercise DUSTLIK is to foster military cooperation and enhance combined capabilities to execute joint operations in semi-mountainous terrain.
- It would focus on a high degree of physical fitness, joint planning, joint tactical drills and basics of special arms skills.

7. (b)

Context: INS Nireekshak arrived in Colombo to participate in the fourth edition of the India–Sri Lanka Diving Exercise (DIVEX 2026).

About

- DIVEX is a **bilateral naval exercise** focused on specialised underwater operations and submarine rescue training.
- It aims to enhance interoperability, operational coordination, and the exchange of best practices between India and Sri Lanka.
- The exercise reflects deepening maritime cooperation and supports regional stability in the Indian Ocean Region, aligned with **India's MAHASAGAR vision**.

8. (a)**Context**

- Recently, the **11th India–Egypt Joint Defence Committee (JDC)** meeting was held in Cairo.

Present Status of Relations

- **Political & Strategic:** Elevated to **Strategic Partnership (2023)**.
 - Regular high-level visits; Egypt invited as **Chief Guest (Republic Day 2023)**
 - Cooperation in **multilateral forums (UN, BRICS Expansion)**.
- **Defence Cooperation**
 - **Exercise Cyclone (Army Exercise)** is a joint special forces exercise **between Indian Army (Para Special Forces) and Egyptian Special Forces**, focused on counter-terrorism operations, desert warfare, urban warfare tactics, and special operations coordination.

9. (a)

Context: India emerged as the **world's fifth-largest military spender in 2025**, with defence expenditure reaching \$92.1 billion, according to the Stockholm International Peace Research Institute (SIPRI).

About SIPRI

- SIPRI was **founded in 1966** by the Swedish parliament as an independent research institute.
- Its main objective is to **conduct research on issues related to international peace and security**, including arms control, disarmament, and conflict resolution.
- It is funded by a combination of government grants, private donations, and project-based funding.
- **SIPRI's flagship publication is the SIPRI Yearbook**, which provides comprehensive data and analysis on global military expenditure, arms transfers, and other relevant security issues.
- SIPRI is based in **Stockholm, Sweden**.

10. (d)

Statement 1 is correct: Vikram VT-21 has been developed by DRDO's Vehicles Research and Development Establishment (VRDE). It is part of India's effort to modernise armoured platforms.

- **Statement 2 is correct:** It has amphibious capability using hydro-jet propulsion. This enables river crossing and enhances mobility.
- **Statement 3 is incorrect:** It is equipped with Nag ATGMs, which are third-generation missiles.

nnnn



Which of the statements given above are correct?

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

6. With reference to Asia Zero Emission Community (AZEC), which of the following statements is/are correct?

1. It is a Japan-led initiative aimed at promoting clean energy transition in Asia.
2. It recognises different developmental needs of Asian economies.

Select the correct answer using the code given below:

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

7. Consider the following statements regarding the RELOS agreement:

1. RELOS was signed in 2025 between India and Russia.
2. The agreement permits permanent stationing of Indian and Russian troops at each other's military bases.

Which of the statements given above is/are correct?

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

8. With reference to the Indo-Lanka Accord, which of the following statements is/are correct?

1. It was signed in 1987 between India and Sri Lanka to address ethnic tensions.
2. It sought to ensure the devolution of political powers to provinces in Sri Lanka to provide greater regional autonomy.

Select the correct answer using the code given below:

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

9. Consider the following statements regarding the World Health Organization Pandemic Agreement:

1. It was adopted by the World Health Assembly in 2025.
2. The Agreement aims to create a legally binding international instrument on pandemic prevention, preparedness, and response.
3. The Pathogen Access and Benefit-Sharing (PABS) system will be finalised automatically upon adoption of the Agreement.

Which of the statements given above are correct?

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

10. With reference to the South Asian Association for Regional Cooperation, consider the following statements:

1. SAARC was established with the signing of its Charter in Dhaka in 1985.
2. SAARC currently has nine member countries including Myanmar.
3. Decisions at all levels in SAARC are taken on the basis of unanimity.

Which of the statements given above are correct?

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

11. Consider the following statements regarding the International Big Cat Alliance (IBCA):

1. It was launched by India to promote global cooperation for conservation of big cats.
2. All big cat species covered under IBCA are found in India.
3. Membership is open only to countries where at least one of the identified big cat species is naturally found.

Which of the statements given above are correct?

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

12. Which of the following countries are members of the Group of Seven (G7)?

1. Italy
2. Japan
3. Spain
4. Germany

Select the correct answer using the code below:

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

13. Consider the following statements regarding the evolution and structure of the Shanghai Cooperation Organisation (SCO):

1. The “Shanghai Five” group was formed in 1996 primarily to address border demarcation and demilitarization issues among China and former USSR republics.
2. Uzbekistan was one of the original members of the Shanghai Five.
3. The official working languages of the SCO are English and Russian.

Which of the statements given above are **not** correct?

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

14. Consider the following statements:

1. OPEC was established in 1960 at the Baghdad Conference by five founding members.
2. The primary objective of OPEC is to coordinate petroleum policies to stabilise oil markets.

Which of the statements given above are correct?

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

EXPLANATIONS

1. (c)

Statement 1 is correct: OPEC was established on 14 September 1960 at the Baghdad Conference. Its five founding members were Iraq, Iran, Kuwait, Saudi Arabia, and Venezuela.

Statement 2 is correct: OPEC+ was formed in 2016 when OPEC invited non-OPEC major oil producers (notably Russia, Mexico, Kazakhstan) to coordinate production cuts, creating the broader OPEC+ alliance.

Statement 3 is correct: OPEC member nations collectively hold approximately 80% of the world's proven crude oil reserves, with the bulk concentrated in the Middle East (Saudi Arabia, Iraq, UAE, Kuwait, Iran).

2. (a)

In News: Russia and China vetoed a UN Security Council resolution aimed at reopening the Strait of Hormuz.

About the United Nations Security Council (UNSC)

- **Brief:** The UNSC is one of the six principal organs of the United Nations, carrying the primary responsibility for maintaining international peace and security. It is the only UN body empowered to issue legally binding resolutions that all UN member states are obligated to comply with under international law.
- **Structure and Composition:** The Council has 15 members divided into two categories:
 - **Permanent Members (P5) with Veto Power:** China, France, Russia, the United Kingdom, and the United States. A single veto from any P5 member is sufficient to block any substantive resolution, regardless of how many other members support it.
 - **Non-Permanent Members (10 seats):** Elected by the UN General Assembly for **two-year terms**, distributed geographically.
- **Headquarters:** New York, USA
- **How Does It Work?**
 - **Voting:** Each member holds one vote. A resolution requires a minimum of 9 affirmative votes with no P5 veto to pass.
 - **Presidency:** Rotates monthly among the 15 members in English alphabetical order.
 - **Binding Nature:** Under Article 25 of the UN Charter, all member states agree to accept and implement UNSC decisions.

3. (d)

In News : India is going to host major diplomatic meetings including the BRICS Foreign Ministers' meeting and the Quad Foreign Ministers' meeting.

BRICS

- BRIC was formally launched at a Foreign Ministers' meeting during the UN General Assembly in New York in 2006, with its first summit held in Russia in 2009.
 - In 2010, South Africa was added, expanding the group to BRICS and joining its first summit in 2011.
- It brings together eleven major emerging markets and developing countries of the world.
- **Members :** Brazil, China, Egypt, Ethiopia, India, Indonesia, Iran, Russia, Saudi Arabia, South Africa and United Arab Emirates.
 - In 2025, several countries—including Belarus, Bolivia, Kazakhstan, Cuba, Malaysia, Nigeria, Thailand, Uganda, Uzbekistan, and Vietnam—joined as BRICS partner countries.
- It serves as a useful platform for consultation and cooperation on contemporary issues having global as well as regional significance, and issues of global political and economic governance.

4. (b)

Statement 1 is correct: The IMF was conceived at the Bretton Woods Conference in 1944 with participation from 44 nations. This marked the foundation of the modern global financial system. It aimed to ensure post-war economic stability.

Statement 2 is not correct: Voting power in the IMF is proportional to the financial contribution of member countries. It is not equally distributed among all members.

Statement 3 is correct: The IMF promotes global monetary cooperation, financial stability, and trade. It also works to reduce poverty and support high employment. These are core objectives of the institution.

5. (a)

In News: India is going to host major diplomatic meetings including the BRICS Foreign Ministers' meeting and the Quad Foreign Ministers' meeting.

Quadrilateral Security Dialogue (Quad)

- It is an informal strategic grouping of India, the US, Japan, and Australia aimed at supporting a free, open, and prosperous Indo-Pacific.
- **Origin** : It began after the 2004 tsunami as a disaster relief coordination effort and was later formalised in 2007 by Japan's then Prime Minister Shinzo Abe.
 - However, it lost momentum due to limited cohesion and concerns it was anti-China.
 - The grouping was revived in 2017 with broader goals beyond maritime security.
- **Secretariat** : Unlike organisations such as NATO or the EU, the Quad has no secretariat or formal decision-making structure and does not include mutual defence commitments.

6. (c)

Context

- India, raised concerns over disruptions in maritime energy routes at the AZEC Plus meeting, amid tensions in the Strait of Hormuz, a critical global energy chokepoint.

About AZEC Plus

- The Asia Zero Emission Community (AZEC) is a **Japan-led initiative** launched in **2023** to promote **decarbonisation, clean energy transition, and energy security** in Asia.
- It is driven by Japan to **provide an alternative, Asia-centric model of energy transition, recognising diverse developmental** needs of Asian economies.
- **AZEC focuses on:**
 - Facilitating **technology transfer in clean energy** (hydrogen, ammonia, renewables).
 - Supporting **carbon neutrality** goals while maintaining economic growth.
 - Strengthening **energy supply chain resilience** in the region.
- **AZEC Plus is an expanded framework** that includes more Asian countries and global institutions such as Asian Development Bank and International Energy Agency.
 - It **addresses emerging challenges** like supply disruptions, critical mineral access, and maritime security.

7. (a)

Statement 1 is correct: Signed in February 2025 and operational from January 12, 2026, **RELOS** is a bilateral military logistics support agreement between India and Russia.

Statement 2 is not correct: Like other logistics agreements (e.g., LEMOA with the U.S.), RELOS is intended for logistics support like fuel, supplies, repair, and access to facilities.

It **does not permit permanent stationing of troops** on each other's bases. Such provisions would imply a far deeper military alliance, which India generally avoids.

8. (c)

Context

- Tamil political parties in Sri Lanka have urged India to sustain pressure for full implementation of the Indo-Lanka Accord.

Indo–Lanka Accord (1987)

- The Indo-Lanka Accord was a **bilateral agreement signed in July 1987** between **Rajiv Gandhi and J. R. Jayewardene** to address the ethnic conflict in Sri Lanka.
- **Objectives:** The Accord aimed to resolve the long-standing conflict between the Sinhalese-majority government and Tamil minorities.
- **Key Provisions:** It sought to **ensure the devolution of political powers** to provinces in order to provide greater regional autonomy.
 - It granted **official status to the Tamil language** alongside Sinhala.

9. (a)

Statement 1 and 2 are correct: It was adopted by the **World Health Assembly in 2025**.

- The aim is to negotiate a **WHO convention on pandemic prevention**, preparedness and response, that would culminate in a **legally binding** international instrument.

Statement 3 is not correct: Following its adoption, the next crucial step is for an **Intergovernmental Working Group (IGWG)** on the Pandemic Agreement to negotiate the details of the Pathogen Access and Benefit-Sharing (PABS) system.

- Hence, PABS details will be negotiated later by an Intergovernmental Working Group (IGWG).

10. (c)

Statement 1 is correct: The South Asian Association for Regional Cooperation (SAARC) was established with the signing of the **SAARC Charter in Dhaka in 1985**.

Statement 2 is not correct: SAARC comprises eight Member States: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

Statement 3 is correct: Decisions at all levels are to be taken on the basis of unanimity; and bilateral and contentious issues are excluded from the deliberations of the Association.

11. (a)

Statement 1 is correct: IBCA was launched by India in 2023 to facilitate global cooperation in conservation of big cats. It focuses on knowledge sharing and resource mobilisation.

- **Statement 2 is incorrect:** Out of seven big cat species, only five are found in India. Jaguar and Puma are not found in India.
- **Statement 3 is correct:** IBCA is open to 97 range countries where these big cats are found. Membership is linked to geographical presence of these species.

12. (b)

Context: Recently, the **G7 Environment Ministers** have elevated desertification, land degradation and drought to the core of their agenda, and termed these conditions '**systemic global challenges**' and '**security risk multipliers**'.

About the G7

- The Group of Seven (G7) is an informal forum that brings together **Italy, Canada, France, Germany, Japan**, the United Kingdom, and the United States of America.
- The European Union also participates in the Group and is represented at the summits by the President of the European Council and the President of the European Commission.

13. (b)

Statement 1 is correct: Shanghai Five emerged in **1996** from a series of border demarcation and demilitarization talks between **4 former USSR republics and China**.

Statements 2 and 3 are not correct: Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan were members of the Shanghai Five.

- With the accession of **Uzbekistan** to the group in **2001**, the Shanghai Five was renamed the SCO.
- **Language:** The SCO's official languages are Russian and Chinese.

14. (c)

Statement 1 is correct: The **Organization of the Petroleum Exporting Countries (OPEC)** is an intergovernmental organization founded in 1960 during the Baghdad Conference. Its original founding members were **Saudi Arabia, Iran, Venezuela, Kuwait, and Iraq.**

- **Statement 2 is correct:** The organization coordinates petroleum supply and demand policies to maintain stable and fair market prices while ensuring a consistent income for oil-producing nations.



SCIENCE & TECHNOLOGY

- The Haber-Bosch process, often seen in the news, is related to:
 - Production of hydrogen from fossil fuels
 - Conversion of nitrogen and hydrogen into ammonia
 - Removal of dissolved salts and impurities from water
 - Generation of hydrogen using renewable energy sources
- Which of the following best describes Quantum Entanglement?
 - A phenomenon where particles move in the same direction regardless of distance
 - A process where two particles share a single quantum state such that measuring one instantly determines the state of the other
 - A method of transferring matter between two points using atomic energy
 - A phenomenon where subatomic particles collide to produce new elements
- With reference to GLP-1 (Glucagon-like Peptide-1) receptor agonist drugs, consider the following statements:
 - They are used in the treatment of both type 2 diabetes and obesity.
 - They promote weight loss by accelerating gastric emptying and increasing appetite.
 - In India, only endocrinologists, internal medicine specialists and cardiologists are authorised to prescribe these drugs as per the Drug Controller General of India.Which of the statements given above are correct?
 - 1 and 2 only
 - 2 and 3 only
 - 1 and 3 only
 - 1, 2 and 3
- With reference to recent developments, what is Qdenga (TAK-003)?
 - A recombinant malaria vaccine
 - A monoclonal antibody for viral infections
 - A DNA-based vaccine for chikungunya
 - A live-attenuated tetravalent dengue vaccine
- With reference to Ammonium Nitrate, consider the following statements:
 - It acts as an oxidising agent and can intensify combustion.
 - It is inherently explosive under normal storage conditions.Which of the statements given above is/are correct?
 - 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- With reference to Childhood Cancers, consider the following statements:
 - Childhood cancers occur in individuals below 18 years of age.

2. All cancers in children are the same as adult cancers in causes and treatment.
3. Leukemias and brain tumours are among the most common childhood cancers.

Which of the statements given above are correct?

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

7. The term “Coulomb Barrier” in the context of nuclear fusion refers to:

- (a) The minimum temperature required to convert hydrogen into plasma state
- (b) The electrostatic repulsion between positively charged nuclei that must be overcome for fusion to occur
- (c) The magnetic field generated inside a tokamak reactor to contain plasma
- (d) The energy threshold beyond which nuclear fission becomes self-sustaining

8. With reference to E20 petrol in India, consider the following statements:

1. The target of achieving 20% ethanol blending was originally set for 2025 and later extended to 2030.
2. Ethanol used in blending is derived from agricultural feedstocks such as sugarcane and maize.
3. E20 petrol has a higher octane rating compared to regular petrol.

Which of the statements given above are correct?

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

9. Consider the following statements regarding Aditya-L1 Mission:

1. It is India’s first dedicated space-based mission to study the Sun.
2. The Aditya-L1 spacecraft is positioned at the Sun–Earth L1 point for continuous solar observation.
3. The mission was launched by PSLV-C57 and has a lifespan of ten years.

How many of the statements given above are correct?

- | | |
|---------------|--------------|
| (a) Only one | (b) Only two |
| (c) All three | (d) None |

10. With reference to nuclear fusion, consider the following statements:

1. It is a process in which two light atomic nuclei combine to form a heavier nucleus with release of energy.
2. Fusion reactions occur in a state of matter known as plasma.
3. In a typical fusion reaction, Deuterium and Tritium combine to form Helium and release a neutron.

Which of the statements given above are correct?

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

11. Consider the following statements:

1. Nuclear fusion is used in energy production in countries like China and the USA.
2. Nuclear fusion could generate four times more energy per kilogram of fuel than fission.

Which of the statements given above is/are correct?

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

12. With reference to Per- and Polyfluoroalkyl Substances (PFAS), consider the following statements:

1. They are naturally occurring organic compounds found in soil.
2. They contain strong carbon–fluorine bonds, making them highly resistant to degradation.
3. They are often referred to as “forever chemicals”.

Which of the statements given above is/are correct?

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

13. With reference to Deep Tech, consider the following statements:

1. Deep Tech innovations are primarily based on scientific discoveries and advanced engineering.
2. Deep Tech startups generally have shorter development cycles and low capital requirements.
3. Technologies such as Artificial Intelligence, Quantum Computing, and Biotechnology fall under Deep Tech.

Which of the statements given above are correct?

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

14. Which of the following Prototype Fast Breeder Reactors has recently achieved criticality?

- (a) Tarapur (b) Rawatbhata
(c) Kalpakkam (d) Kudankulam

15. Consider the following statements regarding wind energy growth in India:

1. India recorded its highest-ever annual wind capacity addition in FY 2025–26.
2. India ranks 4th globally in installed wind capacity.
3. India’s wind capacity has more than doubled between 2014 and 2025.

Which of the statements given above are correct?

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

16. Consider the following statements regarding India’s energy sector:

1. India’s total installed electricity capacity has crossed 500 GW.
2. Non-fossil fuel sources account for more than 50% of total installed electricity capacity.
3. Coal contributes less than 50% of total electricity production in India.

Which of the statements given above are correct?

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

17. The “Lunar Ring” project, recently seen in the news, primarily aims to:
- Launch a lunar mining operation for rare minerals
 - Establish a permanent human colony on the Moon
 - Create a telescope array on the Moon for deep-space observation
 - Build a solar power belt on the Moon to transmit energy to Earth via microwaves
18. With reference to the nuclear power development in India, which of the following statements is/are correct?
- India was the first Asian country to build a nuclear power plant.
 - India established its first nuclear power plant at Tarapur in 1969.
- Select the correct answer using the code given below:
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
19. With reference to Homoeopathy, consider the following statements:
- It is based on the principle that “like cures like.”
 - It uses only plant-based medicines for treatment.
 - Treatment is individualised, focusing on the patient’s overall condition.
- Select the correct answer using the code below:
- 1 and 3 only
 - 2 and 3 only
 - 1 only
 - 1, 2 and 3
20. With reference to the Artemis II mission, consider the following statements:
- It is a crewed mission intended to land humans on the Moon.
 - It is the first human mission to the Moon’s vicinity since Apollo 17.
- Which of the statements given above is/are correct?
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
21. With reference to Immunotherapy, consider the following statements:
- It uses the body’s immune system to fight diseases such as cancer.
 - It directly destroys cancer cells in the same way as chemotherapy.
 - It has shown effectiveness even in aggressive forms of cancer.
- Which of the statements given above are correct?
- 1 and 2 only
 - 2 and 3 only
 - 1 and 3 only
 - 1, 2 and 3
22. Which of the following statements about transition elements is incorrect?
- All d-block elements in the periodic table are transition elements.
 - Transition elements generally exhibit variable oxidation states.
 - They play a vital role in petrochemical refining, polymer manufacturing, and agrochemical industries.
 - These metals are widely used as catalysts due to their unique electronic configurations.

23. What is meant by the term “Hubble tension”?
- The variation in temperature of the Cosmic Microwave Background radiation across the universe
 - The discrepancy between different measurements of the universe’s expansion rate
 - The gradual slowing down of the universe’s expansion due to gravitational forces
 - The difference between visible and dark matter distribution in galaxies
24. With reference to frailty, consider the following statements:
- Frailty is a state of accelerated biological ageing marked by reduced endurance and slower recovery.
 - It is caused by a single identifiable molecular factor.
- Which of the statements given above is/are correct?
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
25. Glufosinate, recently seen in the news, is a:
- Insecticide used to control pests
 - Herbicide used to control weeds
 - Fungicide used to prevent crop diseases
 - Fertilizer used to enhance soil nutrients
26. In the context of neuromorphic computing, memristors are significant because;
- They convert analog signals into digital signals
 - They function only as energy storage devices with constant resistance
 - They mimic biological synapses by adjusting resistance
 - They increase the size of electronic circuits
27. Consider the following statements about Foot-and-Mouth Disease (FMD):
- FMD is caused by an aphthovirus belonging to the family Picornaviridae.
 - There are seven distinct serotypes of FMD, and immunity against one serotype provides cross-protection against all others.
 - Young calves and piglets may die from myocarditis even when adult animals survive infection.
 - Ruminants can act as carriers of the FMD virus in their throat for months after recovery.
- Which of the statements given above are correct?
- 1, 2 and 3 only
 - 1, 3 and 4 only
 - 2, 3 and 4 only
 - 1, 2, 3 and 4
28. Which one of the following is the context in which the term “qubit” is mentioned?
- Cloud Services
 - Quantum Computing
 - Visible Light Communication Technologies
 - Wireless Communication Technologies

29. The terms RTS,S/AS01 and R21/Matrix-M, often seen in news, are related to which of the following?
- Monoclonal antibody therapies for viral infections
 - mRNA-based vaccines for respiratory diseases
 - Vaccines for tuberculosis
 - WHO-recommended malaria vaccines
30. Consider the following statements regarding Infrared Radiation and Smart Sensor Technology:
- Infrared radiation has a frequency slightly lower than that of red visible light and is invisible to the human eye.
 - In a smart washbasin, the photodiode continuously emits infrared light while the IR-LED detects reflected signals.
 - The James Webb Space Telescope operates primarily in the infrared spectrum to observe early universe galaxies whose light has been red-shifted.

Which of the statements given above are correct?

- 1 and 3 only
 - 2 and 3 only
 - 1 and 2 only
 - 1, 2 and 3
31. Which one of the following best describes the term “Fata Morgana”?
- A type of inferior mirage caused by hot air near the Earth’s surface bending light upward
 - A superior mirage caused by temperature inversion where cold air sits below warm air, projecting distant objects above the horizon
 - An atmospheric phenomenon caused by water vapour condensation over cold ocean surfaces creating phantom images
 - A radar anomaly caused by electromagnetic interference between cold and warm ocean currents
32. Truck Mounted Attenuators (TMAs), recently seen in news, are best described as:
- Devices used to monitor vehicle emissions on highways
 - Impact-absorbing safety systems used in highway work zones
 - Sensors installed to regulate traffic signals on expressways
 - Equipment used for toll collection on National Highways
33. With reference to Vikram-1, consider the following statements:
- It is India’s first privately developed orbital launch vehicle.
 - It uses only solid fuel-based propulsion.
 - It can launch satellites into Low Earth Orbit (LEO).
- Which of the statements given above is/are correct?
- 1 and 3 only
 - 2 only
 - 1, 2 and 3
 - 3 only
34. Which of the following statements about bromine in Printed Circuit Board (PCB) manufacturing is correct?

- (a) Bromine is used in the lamination process and is sourced primarily from Qatar
- (b) Bromine is used in the etching process, with ~66% of global supply from Israel and Jordan
- (c) Bromine substitutes copper foil in high-density interconnect boards
- (d) Bromine is a base material for PPE resin synthesis

35. Consider the following statements regarding CAR-T cell therapy:

1. It involves modifying a patient's T cells to express specific receptors.
2. It is a form of immunotherapy that uses the body's immune system.
3. It is not effective against blood cancers.

Which of the statements given above are correct?

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

36. With reference to Leaf Spot Disease (LSD) in plants, consider the following statements:

1. It disrupts photosynthesis and is commonly caused by fungal pathogens thriving in humid conditions.
2. The pathogens responsible for the disease cannot survive outside living plant tissue.

Which of the statements given above is/are correct?

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

37. Consider the following statements regarding geospatial technologies in India:

1. SVAMITVA scheme uses drone technology for mapping rural inhabited areas.
2. Digital India Land Records Modernization Programme (DILRMP) aims to integrate textual and spatial land records.
3. National Geospatial Policy restricts private sector participation in mapping activities.

Which of the statements given above is/are correct?

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

38. The Doppler Effect, used in weather radars, refers to;

- (a) Reflection of waves from solid surfaces
- (b) Absorption of radiation by atmospheric gases
- (c) Change in frequency of waves due to motion of source or observer
- (d) Scattering of light by small particles

EXPLANATIONS

1. (b)

Context: India has taken a major step towards decarbonising its fertilizer sector with the exchange of Green Ammonia Purchase Agreements (GAPA) and Green Ammonia Supply Agreements (GASA) between fertilizers companies and green ammonia producers.

What is Green Ammonia?

- Ammonia (NH_3) is a key input for fertilizers. **Green ammonia** is produced entirely through renewable, carbon-free processes.

- A common method uses **hydrogen from water electrolysis** and **nitrogen separated from air**, which are then reacted via the **Haber-Bosch process** under high temperature and pressure, powered solely by sustainable electricity.

2. (b)

Quantum entanglement occurs when two particles become so deeply linked that they share a single quantum existence — measuring the state of one particle instantaneously determines the corresponding state of the other, regardless of the distance separating them.

3. (c)

Statement 1 is correct: GLP-1 medication was approved by the **United States' Food & Drug Administration in 2005**.

- **GLP-1 drugs (glucagon-like peptide-1 receptor agonists)** are medications developed to treat both type 2 diabetes and obesity by correcting hormonal imbalance.

Statement 2 is not correct: They slow down the gastric emptying, increasing the feeling of fullness.

- This decreases patients' appetites and thereby leads to their weight loss.

Statement 3 is correct: To ensure **ethical pharmaceutical practices** in the **supply chain of GLP-1**, the Drug Controller General of India has intensified its regulatory surveillance against the drug's unauthorised sale and promotion.

- In India, the drug can be prescribed only by endocrinologists, internal medicine specialists and cardiologists.

4. (d)

Context

- Qdenga, developed by Takeda Pharmaceutical Company, has received clearance from India's Subject Expert Committee under the Drugs Controller General of India for individuals aged 4–60 years.

What is Qdenga (TAK-003)?

- TAK-003 is a **live-attenuated, tetravalent dengue vaccine**, containing weakened forms of **all four dengue virus serotypes** (DENV-1, DENV-2, DENV-3, and DENV-4) to stimulate immunity.
 - TAK-003 uses the **DENV2 strain** as the genomic backbone.
- The World Health Organization **prequalified TAK-003 in 2024**, recommending it for use in dengue-endemic areas.
- **Uneven Serotype Protection:**
 - **High efficacy against DENV-2** and moderate against DENV-1.
 - **Lower protection** against DENV-3 and DENV-4, especially in dengue-naïve individuals.
 - **Concern:** India is witnessing a rise in DENV-3 prevalence.

5. (a)

Statement 1 is correct: Ammonium nitrate is an oxidising agent — it supplies oxygen to accelerate combustion, making fires involving it extremely difficult to extinguish as the material provides its own oxygen supply. This is precisely why it intensifies combustion and is classified as a hazardous chemical under the Hazardous Chemicals Rules, 1989.

Statement 2 is not correct: Ammonium nitrate is not inherently explosive under normal storage conditions. It is a stable compound under standard conditions. It becomes explosive only under specific circumstances:

- When subjected to high heat / thermal shock
- When contaminated with certain substances (e.g., fuel oil → forms ANFO).

6. (c)

Statement 1 is correct: Childhood cancers are cancers that occur in children and adolescents (usually under 18 years of age).

Statement 2 is not correct: They differ from adult cancers in their types, causes, and treatment response.

Statement 3 is correct: The most common types of cancer affecting children include leukemias, brain tumours and solid tumours such as neuroblastoma and Wilms tumour.

7. (b)

The Coulomb Barrier is specifically the electrostatic (electromagnetic) repulsion between two positively charged nuclei. Since like charges repel, two nuclei naturally push each other away. Fusion can only occur when nuclei are brought close enough for the Strong Nuclear Force to take over and to do that, they must first overcome this repulsion barrier. The extreme temperatures in a fusion reactor exist because of the Coulomb Barrier — nuclei need enormous kinetic energy to get close enough despite the repulsion.

8. (a)

In Context: India has officially mandated the nationwide rollout of **E20 petrol at all fuel stations from April 1, 2025.**

About

- It marks a significant milestone in **India's Ethanol Blended Petrol (EBP) Programme**, which originally targeted 20% blending by 2030 but was advanced to 2025 under the **revised National Biofuel Policy (2022)**.
- The mandate is being implemented jointly by the **Ministry of Petroleum and Natural Gas and the Bureau of Indian Standards (BIS)**.
- Ethanol used in the blend is a **biofuel derived from agricultural feedstocks primarily sugarcane, maize, damaged food grains, and surplus rice**. It is produced through fermentation and distillation of these crops, making it a renewable and domestically sourced energy input.
- E20 petrol carries a **higher octane rating of approximately 95 RON compared to 91–92 RON of regular petrol** — meaning smoother engine combustion and better anti-knock performance.

9. (b)

Statement 1 is correct: Aditya-L1 is **India's first dedicated solar mission**. It has been launched to study the Sun and its outer atmosphere in detail.

- **Statement 2 is correct:** The spacecraft is placed at the **Sun–Earth L1 point**, which allows almost uninterrupted observation of the Sun. This is useful for studying solar activity continuously.
- **Statement 3 is not correct:** Aditya-L1's designed mission life is 5 years at the L1 halo orbit. PSLV-C57 launched it on September 2, 2023, and it reached L1 orbit on January 6, 2024.

10. (d)

All three statements are correct: Nuclear fusion is the process by which **two light atomic nuclei** combine to form a **single heavier one** while releasing **massive amounts of energy**.

- Fusion reactions take place in a **state of matter called plasma** — a hot, charged gas made of positive ions and free-moving electrons with **unique properties distinct from solids, liquids or gases**.

- The sun, along with all other stars, is powered by this reaction.
- **Process:** The **Deuterium (H-2)** and **Tritium (H-3)** atoms are combined to form **Helium (He-4)**. A free and fast neutron is also released as a result.
 - The neutron is powered by the kinetic energy converted from the 'extra' mass left over after the combination of lighter nuclei of deuterium and tritium occurs.

11. (b)

Statement 1 is not correct: Nuclear fusion is not yet used for commercial energy production in China, the USA, or anywhere else. While both countries are investing billions and making rapid advancements in research and development.

Statement 2 is correct: Fusion could generate four times more energy per kilogram of fuel than fission (used in nuclear power plants) and nearly four million times more energy than burning oil or coal.

12. (b)

In Context: The European Union has strengthened water pollution regulations to control harmful chemicals such as PFAS, often called "forever chemicals".

About PFAS

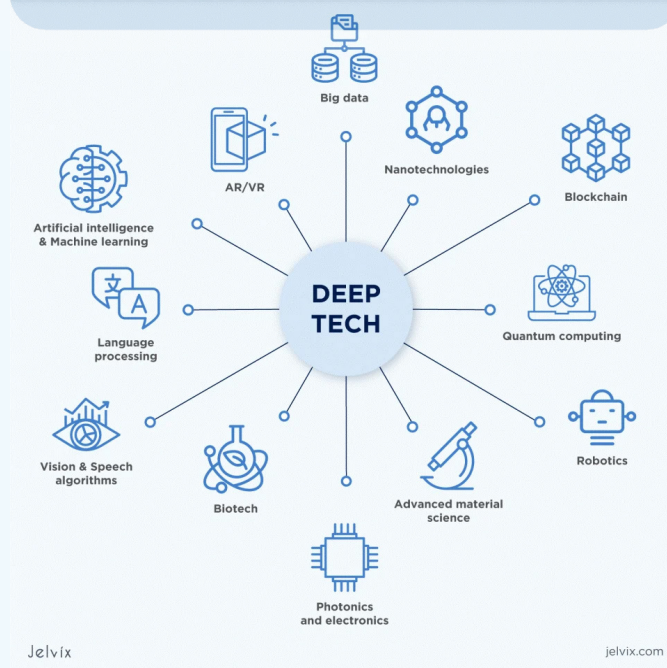
- PFAS (Per- and Polyfluoroalkyl Substances) are a large group of **man-made chemicals**.
- They contain strong carbon–fluorine bonds, making them highly stable and resistant to breakdown.
- These are classified as **Persistent Organic Pollutants (POPs)** under the **Stockholm Convention**.
 - The **Stockholm Convention on Persistent Organic Pollutants (POPs)** is a legally binding international treaty aimed at protecting human health and the environment from highly hazardous chemicals.

13. (c)

Statement 1 is correct: Deep Tech is rooted in scientific research and engineering innovation.

Statement 2 is not correct: Deep Tech startups typically have long gestation periods and high capital requirements.

Statement 3 is correct:



14. (c)

Context

- India has achieved a major milestone as the indigenously built Prototype Fast Breeder Reactor (PFBR) at Kalpakkam has attained criticality.

Prototype Fast Breeder Reactor (PFBR)

- PFBR is an **advanced reactor** that **generates more fissile fuel** than it consumes.
- India's PFBR is located at Kalpakkam and operated by Bharatiya Nabhikiya Vidyut Nigam Limited. It uses Uranium–**Plutonium Mixed Oxide (MOX) fuel**.
- It is called a fast breeder because;
 - It uses **high-energy, fast neutrons** to sustain the fission reaction, rather than the slowed-down thermal neutrons used in standard reactors.
 - It converts fertile material (like Uranium-238) into fissile material (Plutonium-239).
- **The criticality refers** to the point at which a reactor achieves a **self-sustaining nuclear fission reaction**, where the number of neutrons produced is sufficient to keep the reaction going without external intervention.

15. (d)

Statement 1 is correct: India achieved its highest-ever annual wind capacity addition of 6.05 GW in FY 2025–26. This surpassed the earlier peak recorded in FY 2016–17.

Statement 2 is correct: India currently ranks 4th globally in installed wind capacity. This highlights its significant position in the global renewable energy landscape.

Statement 3 is correct: Installed wind capacity increased from about 21 GW in 2014 to over 51 GW by 2025. This indicates more than doubling over a decade.

16. (a)

Statement 1 and 2 are correct: As of 2025, the country's total installed electricity capacity has crossed 500 GW, reaching 509.6 GW.

- **The total non-fossil power installed capacity** has reached 262.74 GW in 2025 which is 51.5% of the total installed electricity capacity in the country.

Statement 3 is not correct: **Fossil-fuel-based sources:** 244.80 GW, about 49 % of the total, making coal a source of up to almost half the energy needs. Also, **coal contributes about 74% of total electricity production in India.**

17. (d)

Context: Japan's **Shimizu Corporation** has proposed an ambitious mega-project called the "**Lunar Ring**"—a massive belt of solar power plants along the Moon's equator.

About the Project

- The project **envisions a solar panel belt stretching 11,000 km and about 400 km wide around the Moon.**
- The structure would be constructed by **robots using lunar regolith (soil)**, reducing the need to transport materials from Earth.
- It would continuously capture solar energy and beam it to Earth via **microwaves**, enabled by the Moon's near-constant sunlight and lack of atmosphere.
- It is a **variant of space-based solar power (SBSP)** that involves capturing solar energy in space using satellites with photovoltaic cells or mirrors and transmitting it wirelessly via microwaves or lasers to Earth-based receivers.

- **Key Challenges:** High cost of transporting infrastructure, technological constraints, energy dissipation & operational risks due to space debris.

18. (b)

Context

- India has achieved a major milestone as the indigenously built Prototype Fast Breeder Reactor (PFBR) at Kalpakkam has attained criticality.

Nuclear Power programme of India

- **Establishment:** India established the **Atomic Energy Commission in 1948**.
 - **In 1956**, Asia's first research reactor, **Apsara**, was commissioned at the Bhabha Atomic Research Centre (BARC) in Trombay.
 - **India was the second Asian nation** to build a nuclear power plant in **1969** at Tarapur, just after Japan and long before China.
- India has a three-phase programme of nuclear power visioned by **Dr Homi J Bhabha**, the father of India's nuclear programme.

19. (a)

Context: World Homoeopathy Day is observed every year on April 10 to commemorate the birth anniversary of **Dr Samuel Hahnemann (1755–1843)**, a German physician and founder of Homoeopathy.

About Homoeopathy

- Homoeopathy is a system of medicine based on the principle of "like cures like" meaning substances that cause symptoms in a healthy person can help treat similar symptoms in a patient.
- The term comes from the Greek words **Homois (similar)** and **Pathos (suffering)**. It was formalised in **1796** by a German physician Samuel Hahnemann, whose work **Organon of Medicine** continues to guide its practice.
- Homoeopathic medicines are prepared from natural sources like plants, minerals, and animals through a process of **dilution and succussion**. A key feature is its **individualised approach**, where treatment focuses on the overall physical and mental condition of the patient rather than just the disease.
- The **theme for 2026** is "**Homoeopathy for Sustainable Health.**" It aligns with global goals such as Universal Health Coverage and the United Nations Sustainable Development Goals, especially **SDG 3** (Good Health and Well-being).

20. (b)

Context

- During the Artemis II mission, astronauts observed meteorite impacts on the Moon.

About Artemis II Mission

- Artemis II mission is a crewed lunar flyby mission under **NASA's Artemis programme**.
- It was launched on April 1, 2026, marking the first human mission to the Moon's vicinity since Apollo 17 (1972).
 - The mission carries four astronauts aboard the **Orion spacecraft**.
- It is a 10-day mission, orbiting the Moon and returning to Earth without a lunar landing.

21. (c)

Statement 1 is correct: Immunotherapy is a type of medical treatment that **uses the body's own immune system to fight diseases**.

Statement 2 is not correct: While chemo and radiotherapy directly kill cancer cells and some healthy cells along with it, immunotherapy pushes the body's own immune system to recognise and kill cancer cells.

- Being **highly targeted**, immunotherapy spares healthy cells.

Statement 3 is correct: These therapies have been shown to extend life even in patients with aggressive forms of cancer.

22. (a)

Context

- Recent research published in Nature has demonstrated that **aluminium** can mimic certain catalytic properties of **transition metals**.

What are Transition Metals?

- Transition metals are elements **located in the d-block** of the periodic table and are characterised by **partially filled d-orbitals**.
 - **Examples:** Palladium, Platinum, and Rhodium.
- **Applications:** These metals are widely **used as catalysts** due to their **unique electronic configurations**. Their catalytic properties significantly reduce reaction time and improve yield and efficiency.
 - They play a vital role in **petrochemical refining, polymer manufacturing, and agrochemical industries**.

Key Properties of Transition Metals

- Transition metals **exhibit variable oxidation states**, which allow them to gain and lose electrons easily.
- They facilitate **Redox Reaction processes**, which are essential for catalytic activity.
- They form **stable complexes with ligands**, enabling controlled chemical transformations.

23. (b)

Option (b) is correct: The Hubble tension refers to the persistent discrepancy between different methods of measuring the universe's expansion rate. The Cosmic Microwave Background method gives a lower value, while the Cosmic Distance Ladder method gives a higher value. This mismatch is referred to as Hubble Tension.

24. (a)

Context: A study published in the journal **Cell Stem Cell** highlights the potential of **stem cell therapy to treat frailty**.

What is Frailty?

- Frailty is a state of **accelerated biological ageing** marked by lower endurance and slower recovery.
- It is **not a single disease** with a single cause, rather it arises from the cumulative effects of chronic inflammation, muscle loss, vascular ageing, immune dysfunction, and long-term stress.
- Because there is no single molecular target, most medical research has focused on managing the consequences of frailty rather than reversing the condition itself.

25. (b)

In News: The government has imposed a six-month restriction on imports of glufosinate and its salts, a herbicide used in farming.

Glufosinate-ammonium

- It is a herbicide used to control a broad range of weeds.
- It is highly water-soluble and has low potential to leach into groundwater.
- It is considered highly hazardous, with risks including neurotoxicity, reproductive harm, cardiovascular effects, and fetal damage
- Its volatile nature exposes farmers and nearby populations through inhalation and skin contact.

26. (c)

Memristors can change their electrical resistance based on the history of the current that has passed through them, mimicking the behavior of **biological synapses** (the connection strength between neurons).

Context

- Scientists have developed a hafnium-oxide-based memristor, a brain-inspired nanodevice, capable of significantly reducing energy consumption in artificial intelligence systems.

Neuromorphic Computing

- Neuromorphic computing is a field of technology that seeks to **replicate the architecture and functioning of the human brain** in electronic systems.
- In the human brain, **memory and processing occur simultaneously** within synapses, which leads to highly energy-efficient computation.
- This approach is fundamentally different from the **Von Neumann architecture**, which is used by nearly all modern general-purpose computers.
 - In this **memory and processing units are physically separated**, resulting in significant energy consumption due to constant data transfer.

What is a Memristor?

- A memristor is an electronic component that combines the properties of **memory and resistance**, allowing it to both store and process information within the same device.
- Unlike conventional resistors, a **memristor retains its resistance state even after the power supply is switched off**, thereby enabling non-volatile memory.
- In neuromorphic systems, a **memristor functions as an artificial synapse**, where different resistance levels represent the strength of connections between neurons.
- The memristor uses a **p-n junction mechanism** that allows smooth and continuous adjustment of resistance.

27. (b)

Statement 1 is correct: FMD is caused by the Foot-and-mouth disease virus (FMDV), which is an Aphthovirus within the Picornaviridae family. It is a highly contagious viral disease affecting cloven-hoofed animals.

Statement 2 is not correct: While there are seven distinct serotypes (O, A, C, SAT 1, SAT 2, SAT 3, and Asia 1), infection with or vaccination against one serotype does not provide cross-protection against the others. This is why FMD is so difficult to control, as vaccines must be tailored to the specific circulating serotype.

Statement 3 is correct: In adult animals, FMD is rarely fatal, but it is devastating for productivity. However, in young calves, piglets, and lambs, the virus can cause myocarditis (inflammation of the heart muscle), which often leads to sudden death before any “typical” blisters appear.

Statement 4 is correct: Ruminants (like cattle and buffalo) can become asymptomatic carriers. The virus can persist in the oropharynx (throat) for several months, and in some cases, over two years in cattle, even after the animal has recovered from clinical symptoms.

28. (b)

A qubit (quantum bit) is the fundamental unit of information in quantum computing, the quantum analogue of a classical binary bit (0 or 1). A qubit can exist in multiple states simultaneously unlike a classical bit which is strictly 0 or 1. Two qubits can be correlated such that the state of one instantly influences the other — regardless of distance.

29. (d)

Context

- **Gene drive technology** is emerging as a novel approach to genetically modify mosquitoes to **prevent the transmission of Malaria**.

What is Malaria?

- **Malaria** is a life-threatening disease spread to humans by some types of mosquitoes. It is mostly found in tropical countries.
- **Transmission:** It is caused by **plasmodium protozoa**. The plasmodium parasites spread through the bites of infected female Anopheles mosquitoes. Blood transfusion and contaminated needles may also transmit malaria.
- **Types of parasites:** There are 5 Plasmodium parasite species that cause malaria in humans and 2 of these species – **P. falciparum** and **P. vivax** – pose the greatest threat. The other malaria species which can infect humans are **P. malariae**, **P. ovale** and **P. knowlesi**.
 - **P. falciparum is the deadliest malaria parasite** and the most prevalent on the African continent. *P. vivax* is the dominant malaria parasite in most countries outside of sub-Saharan Africa.
- **Symptoms:** Fever and flu-like illness, including chills, headache, muscle ache and fatigue.
- **Vaccine:** Since 2021, WHO has recommended broad use of the **RTS,S/AS01 malaria vaccine** among children living in regions with moderate to **high P. falciparum malaria** transmission.
 - In 2023, WHO recommended a second malaria vaccine, **R21/Matrix-M**.

30. (a)

Statement 1 is correct: Infrared radiation lies just beyond red in the electromagnetic spectrum. It has lower frequency (and longer wavelength) than visible red light, making it invisible to the human eye.

Statement 2 is not correct: The roles are reversed here. In a smart washbasin:

- The IR-LED emits infrared radiation.
- The photodiode detects the reflected IR signal.

Statement 3 is correct: The James Webb Space Telescope primarily observes in the infrared spectrum, allowing it to detect highly red-shifted light from early galaxies formed soon after the Big Bang.

31. (b)

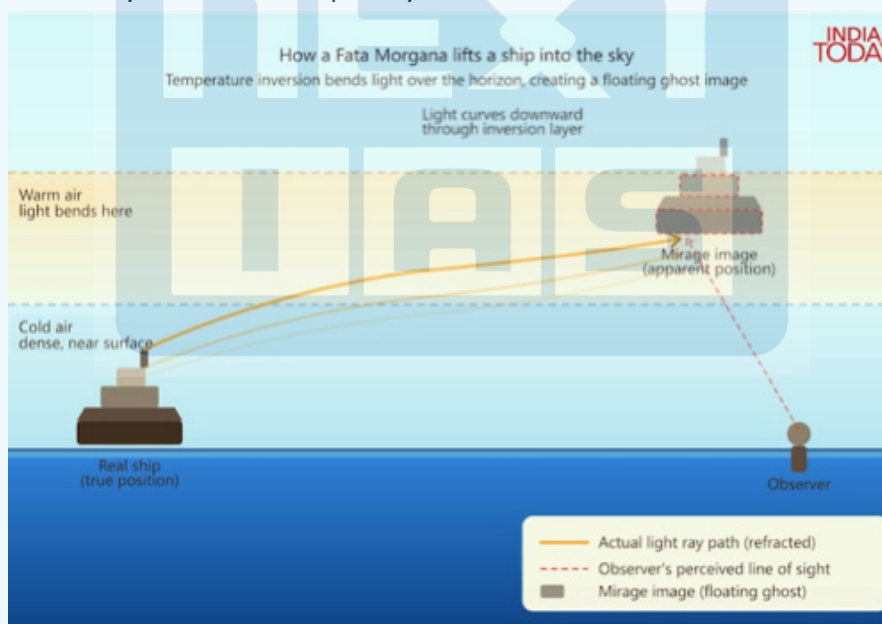
About Fata Morgana

- Fata Morgana is a type of superior mirage, an optical phenomenon in which light from a distant object, such as a ship, coastline, or iceberg, is bent through layers of air with sharply different temperatures, causing the object's image to appear displaced typically elevated high above its actual position.

- The name derives from the Arthurian sorceress Morgan le Fay, whose legends in Italian folklore described castles and cities rising from the sea.

The Physics Behind It

- **Refraction of Light:** Means the bending of light when it passes from one medium into another of different optical density.
 - When light passes from a less dense medium (warm, thin air — where it travels faster) into a more dense medium (cold, dense air — where it travels slower), it bends toward the denser medium.
- **Temperature Inversion:** Under normal atmospheric conditions, air temperature decreases with altitude, the ground absorbs solar radiation, heats the air directly above it, and warmth diminishes as height increases. This is the standard atmospheric lapse rate.
 - A **temperature inversion is a reversal of this normal order** where a layer of cold, dense air sits directly below a layer of warmer, lighter air. This inverted arrangement is the essential atmospheric precondition for Fata Morgana formation.
- **Atmospheric Ducting and Beyond-Horizon Propagation:** In a temperature inversion, as light from a distant ship travels toward an observer, it enters the inversion layer — the sharp thermal boundary between cold air below and warm air above. At this boundary, light continuously refracts downward — curving along the temperature gradient rather than escaping upward into the sky.
 - If the temperature difference between the two layers is steep enough, light curves so dramatically that it bends around the curvature of the Earth — reaching an observer who is technically beyond the ship's geometric horizon. Under normal conditions, an object 40 kilometres away would be completely hidden below the horizon.



32. (b)

Context: The Ministry of Road Transport and Highways is deploying advanced safety systems like **Truck Mounted Attenuators (TMAs)** to enhance safety on National Highways.

What is Truck Mounted Attenuators (TMAs)?

- TMAs are specially designed impact-absorbing safety devices that play a critical role in protecting both workers and road users.
- In the event of a collision, these systems **absorb and dissipate kinetic energy**, reducing the force of impact. This helps:

- Protect maintenance crews working ahead of the vehicle;
- Reduce injury risks for occupants of the impacting vehicle;
- Minimize the severity of accidents in highway work zones.
- In many ways, TMAs act like an **invisible shield** — standing between danger and human life.
- The **deployed TMAs** are equipped with high-intensity wig-wag warning lights, enhancing visibility in low-light and foggy conditions.

33. (a)

Context: Skyroot Aerospace has dispatched its first orbital rocket, Vikram-1, to the Satish Dhawan Space Centre for final integration and launch preparations, marking a key step toward India's first private orbital launch.

About Vikram-1 Launcher

- **Vikram-1** is a **multi-stage launch vehicle** using both solid and liquid fuel-based propulsion systems.
- It is designed to launch **satellites up to 350 kg** into **Low Earth Orbit (LEO)**.
 - LEO lies between **160–2,000 km** above Earth and has seen a surge in satellite launches in recent years, with many being the Starlink communication satellites.
- The rocket is made of carbon composite instead of metals, and houses a 3D-printed indigenously made engine making its manufacturing and assembly easier, quicker and cheaper.
- The launch vehicle has been named to honour **Dr Vikram Sarabhai**, considered to be the father of the Indian space programme, and its propulsion systems honour several other scientific greats — the solid propulsion system is called Kalam, the liquid Raman, and the cryogenic Dhawan.

Do you know?

- Skyroot, founded by Pawan Chandana and Bharath Dhaka, was also the first private company to carry out a **single-stage sub-orbital flight** in 2022, followed by another company, Agnikul.
- A sub-orbital flight is launched at a **slower speed than the orbital velocity**, so it reaches outer space but cannot get into an orbit around Earth.

34. (b)

Bromine plays a role in the etching stage of PCB manufacturing, where chemical solutions are used to remove unwanted copper from the board surface to create precise circuit patterns. Bromine-based compounds are suitable for this controlled chemical removal process. Additionally, a significant share of global bromine production—about two-thirds—comes from the Dead Sea region, mainly from Israel and Jordan.

35. (a)

Statement 1 is correct: CAR-T therapy involves engineering a patient's T cells to express Chimeric Antigen Receptors. These modified cells can identify and destroy cancer cells.

- **Statement 2 is correct:** It is a type of immunotherapy that uses the immune system to target disease. It enhances the body's natural defence mechanisms.
- **Statement 3 is incorrect:** CAR-T therapy has been most successful in blood cancers such as those involving CD19. Its application to solid tumours is emerging but not exclusive.

36. (a)

Statement 1 is correct: Leaf Spot Disease affects the leaf surface, forming spots that reduce the effective area for photosynthesis. Over time, this weakens plant growth. Most

cases are caused by fungal pathogens, which spread rapidly in humid conditions with prolonged leaf wetness (rain, irrigation, dew).

Statement 2 is not correct: The pathogens are not dependent solely on living tissue. They can survive in infected leaf litter, buds, or twigs during unfavorable seasons (e.g., winter) and re-infect plants in the next growing season.

37. (a)

In News: Recently, the **Department of Land Resources** emphasized that **geospatial information** has emerged as a critical public good supporting informed decision-making, resilient infrastructure, land governance, environmental management, urban planning, disaster response, and sustainable development.

Statement 1 is correct: The **SVAMITVA scheme** uses **drone technology** to map rural inhabited areas and provide property cards.

Statement 2 is correct: **DILRMP** aims at **digitisation and integration of textual (records) and spatial (maps) data** for better land governance.

Statement 3 is not correct: The **National Geospatial Policy (2022)** actually **liberalises the sector and encourages private participation**, rather than restricting it.

38. (c)

Context

- India has expanded its Doppler Weather Radar network since 2014, increasing from 14 operational units to 50, marking over 250 percent rise.

Doppler Weather Radar Network

- A **Doppler Weather Radar (DWR) network** is a system of multiple radar stations working together to monitor weather over a large area.
- Operated by the India **Meteorological Department (IMD)**, this network uses advanced **S-band, C-band, and X-band** radars to provide real-time, high-accuracy data, improving nowcast detection to **91%**.
- **Applications:**
 - **Weather Forecasting:** It tracks formation and movement of clouds and storms, helps predict rainfall, cyclones, and thunderstorms.
 - **Early Warning Systems:** Detects severe weather events like Cyclones, Tornadoes and Lightning and cloudbursts.
 - **Agriculture Support:** Provides agro-meteorological advisories to farmers.

How Does It Work?

- The Doppler Weather radar network is **based on the Doppler Effect**, discovered by **Christian Doppler**, which explains the **change in frequency of waves due to motion**.
- The radar emits **microwave signals** into the atmosphere. These signals bounce back (echo) after hitting objects like raindrops, clouds, or dust.
 - By analyzing the change in frequency of the returned signal the speed of particles and direction of movement is identified.



3. The Sundarbans is the largest mangrove forest ecosystem shared by India and Bangladesh.

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All three (d) None

6. With reference to the Montreal Protocol, consider the following statements:

1. It is a legally binding international treaty to phase out ozone-depleting substances.
2. It is the first United Nations treaty to achieve universal ratification.
3. India became a Party to the Protocol in 1992.
4. It primarily targets the reduction of Hydrofluorocarbons (HFCs) to mitigate climate change.

Which of the statements given above is/are incorrect?

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

7. The world's first wildlife and veterinary sciences university, recently seen in the news, is located in which of the following states?

- (a) Maharashtra (b) Gujarat
(c) Karnataka (d) Rajasthan

8. With reference to the Indus River Dolphin, consider the following statements:

1. It is the state aquatic animal of Punjab.
2. It is listed as the endangered on the IUCN red list of threatened species.

Which of the statements given above are correct?

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

9. With reference to microbial methane, consider the following statements:

1. It is produced in oxygen-depleted (anaerobic) environments such as wetlands, rice paddies, and landfills.
2. It is a non-greenhouse gas and does not contribute significantly to climate change.

Which of the statements given above is/are correct?

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

10. Consider the following statements regarding sentinel species:

1. They provide early warning signals about environmental degradation.
2. They are always the top predators in a food chain.
3. Amphibians like frogs are commonly used as sentinel species due to their permeable skin.
4. Sentinel species are completely immune to environmental stressors.

Which of the statements given above is/are correct?

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

Which of the statements given above is/are correct?

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

17. Which state has become the first in India to implement Marine Spatial Planning (MSP)?

- (a) Gujarat (b) Tamil Nadu
(c) Andhra Pradesh (d) Odisha

18. The Santa Barbara oil spill is considered significant in environmental history because it;

- (a) Led to negotiations culminating in the Kyoto Protocol
(b) Triggered grassroots mobilisation that culminated in the first Earth Day
(c) Resulted in the adoption of the High Seas Treaty
(d) Initiated the establishment of the United Nations Environment Programme

19. With reference to the Shekha Jheel Bird Sanctuary, which of the following statements is/are correct?

1. It is a freshwater wetland ecosystem, located in Madhya Pradesh.
2. It has been designated as India's 99th Ramsar Site.

Select the correct answer using the code given below:

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

20. Which of the following statements about the Gangetic dolphin's vision is correct?

- (a) It has excellent vision adapted to turbid water
(b) It lacks a crystalline eye lens and is functionally blind
(c) It can see clearly only in shallow water
(d) It uses both vision and echolocation equally

21. Consider the following statements:

1. Methane is responsible for nearly 30% of global warming since the Industrial Revolution.
2. Methane remains in the atmosphere longer than carbon dioxide but has lower heat-trapping potential.

Which of the statements given above is/are correct?

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

22. Consider the following statements regarding ethanol blending and flex-fuel vehicles:

1. E100 fuel refers to petrol blended with 100% ethanol without any impurities or water content.
2. Flex-fuel vehicles can run on varying mixtures of petrol and ethanol, with sensors adjusting engine parameters.

Which of the statements given above is/are correct?

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

23. With reference to Nilgiri Tahr, consider the following statements:
1. It is an endemic species of the Western Ghats and is found at high elevations on cliffs and grass-covered hills.
 2. The Eravikulam National Park is home to the largest population of the Nilgiri tahr.
 3. The IUCN Red List of Threatened Species classifies it as Least Concern.

How many of the statements given above are correct?

- (a) Only one (b) Only two
(c) All the three (d) None

24. Consider the following statements
1. Tapirs are mammals that only inhabit forest regions of South America and Central America.
 2. The IUCN Red list of Threatened species classifies Malay Tapir as Vulnerable.

Which of the statements given above is/are correct?

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

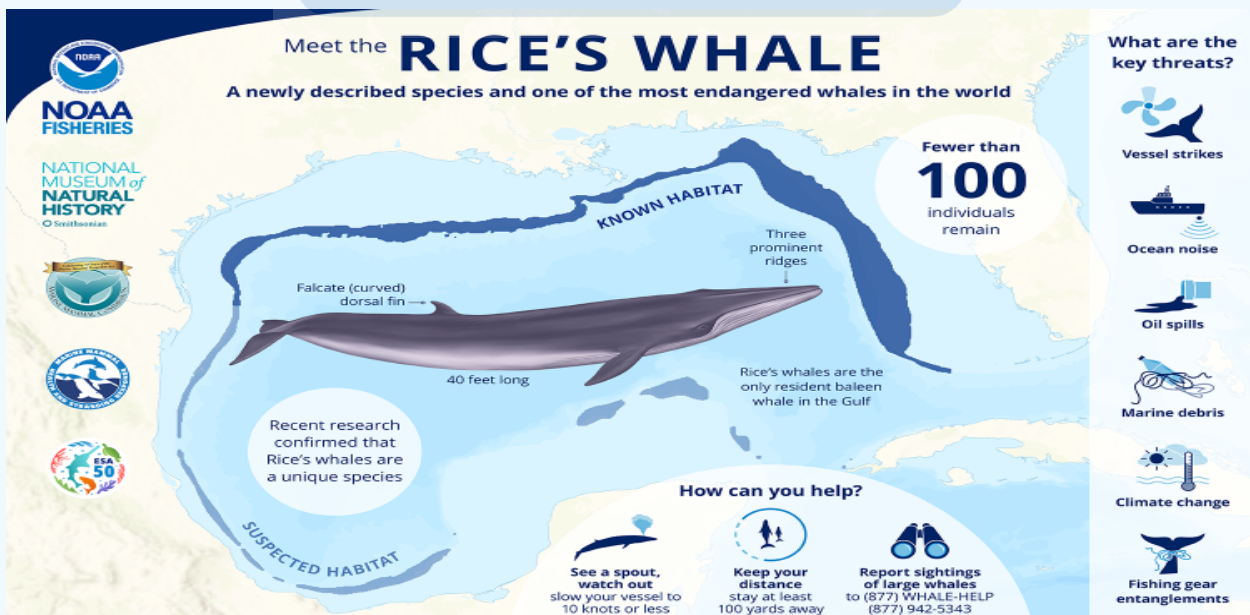
EXPLANATIONS

1. (a)

Context: The US expansion of oil and gas drilling could push the Rice Whale to extinction.

Rice's Whale (*Balaenoptera ricei*)

- Belonging to the **baleen whale family *Balaenopteridae***, it is one of the rarest whale species, with fewer than 100 individuals remaining.
- **Range and Habitat:** It is **endemic** to the **northern Gulf of Mexico** and lives year-round within this region without undertaking long migrations.
- **Diet:** Primarily feeds on **small fish and squid**.
- **Threat:** Oil drilling, vessel strikes, and climate change.
- **Conservation status:** It is listed as **Critically Endangered** on the IUCN Red List.



2. (a)

In News: The Central Board of Indirect Taxes and Customs (CBIC) has introduced a **temporary relief measure** allowing **manufacturing units in Special Economic Zones (SEZs)** to sell goods in the **Domestic Tariff Area (DTA)** at **concessional customs duty rates**.

Statement 1 is correct: As per the SEZ policy framework, SEZs are considered **foreign territory for trade, tariffs, and customs purposes**. It allows **duty-free imports and exports** within SEZs.

Statement 2 is not correct: Supplies from **DTA to SEZ** are treated as **exports**, not imports.

- Conversely, **SEZ to DTA** is treated as **imports** and attracts customs duties.

Statement 3 is correct: The **SEZ Act, 2005** provides the legal framework, and the **SEZ Rules, 2006** operationalizes the Act.

Statement 4 is not correct: Tax benefits exist but are **conditional, time-bound**, and subject to policy changes; hence, **not 'absolute exemption'**.

3. (a)

Context: A controversy has erupted after images of an elephant painted bright pink during a photoshoot in Jaipur went viral, raising concerns over animal welfare.

About

- Elephants are the **largest land animals** and are classified into three species — African Savanna, African Forest, and Asian.
- The **Asian elephant is Endangered**, and India hosts over **60% of the global population**.
- However, India's elephant population has seen a **decline of about 18%**, highlighting concerns like habitat loss and human-elephant conflict.



ANIMALIA - MAMMALIA

GLOBAL

African Forest Elephant

Loxodonta cyclotis

↓ Decreasing



ANIMALIA - MAMMALIA

GLOBAL

Asian Elephant

Elephas maximus

↓ Decreasing



ANIMALIA - MAMMALIA

GLOBAL

African Savanna Elephant

Loxodonta africana

↓ Decreasing



feedback

4. (c)

Statement 1 is correct: Tar balls are fragments or lumps of oil weathered to a semi-solid or solid consistency, feel sticky, and are difficult to remove from contaminated surfaces.

Statement 2 is not correct: They are **not volcanic in origin**, but formed from oil spills and hydrocarbon weathering.

Statement 3 is correct: These tar balls **contain toxic contaminants**, such as heavy metals, trace elements, and persistent-organic pollutants, and pose environmental and health risks.

5. (b)

Statement 1 is correct: Some parts of the Sundarbans are shifting from a carbon sink to a carbon source. This means they are releasing more carbon dioxide than they are absorbing. It reflects weakening ecological function.

Statement 2 is not correct: The forest is becoming more uniform with fewer species, indicating reduced biodiversity. Decline in biodiversity is associated with loss of species diversity, not increase.

Statement 3 is correct: The Sundarbans is described as the largest mangrove forest ecosystem shared by India and Bangladesh. It represents a unique transboundary ecological region. Its scale makes it globally significant.

6. (c)

Context

- The Government of India has directed that no new environmental clearances will be granted for hydrofluorocarbon (HFC) production projects beyond December 31, 2027.
 - It is aligned with India's commitments under the **Montreal Protocol and the Kigali Amendment**.

Conventions for Protection of Ozone layer

- **Vienna Convention:** First convention for the protection of the Ozone layer.
 - To promote cooperation among nations by exchanging information on the effects of human activities.
- **Montreal Protocol:** It is a legally binding treaty adopted in **1987**, on Substances that Deplete the Ozone Layer. It is the first United Nations treaty to achieve **universal ratification**, with all **198 UN member** states as parties.
 - **India** became a Party to the Montreal Protocol in **1992**.
 - It successfully **phased out ozone-depleting substances** such as chlorofluorocarbons (CFCs).
- **Kigali Agreement:** Around 197 countries agreed at Kigali to reduce the use of Hydrofluorocarbons (HFCs) by roughly 85% of their baselines by the late 2040s, by amending the 1987 Montreal Protocol.
 - India ratified the **Kigali Amendment in 2021**.

7. (b)

Context: India just got its first global university for wildlife and veterinary sciences.

About

- Vantara, the global wildlife conservation organisation founded by Reliance Industries has announced the launch of Vantara University in Jamnagar, **Gujarat**.
- Unlike conventional veterinary institutes that focus on livestock and pets, it specialises in wildlife conservation and care of endangered species.

8. (c)

Context

- The dolphin is one of the world's most endangered freshwater cetaceans and a flagship species of the **Indus river system**.

About dolphin

- It was once distributed across the **Indus and its tributaries in Pakistan and northwestern India**, but now primarily restricted to the Indus River in Pakistan.

- Its range has drastically contracted due to flow regulation, loss of connectivity, pollution, climate change and entanglement in fishing gears.
- It is the **state aquatic animal of Punjab** and is listed as **endangered on the IUCN list**.

9. (a)

Context: As per a new study, **Microbial methane** leaking from non-producing oil and gas wells is being emitted at rates **nearly 1,000 times higher than previously estimated**.

About

- **Microbial methane (or biogenic methane)** is **methane gas** produced by microorganisms, specifically **archaea** known as **methanogens**.
- It is produced through the **decomposition of organic matter** in oxygen-depleted (anaerobic) environments.
- It is a major component of the **global carbon cycle**, generated in wetlands, rice paddies, landfills and digestive systems of ruminants.
- Methane is a powerful **greenhouse gas** when released into the atmosphere, regardless of its origin.

10. (a)

In News: Recently, the **International Union for Conservation of Nature (IUCN)** declared the **Emperor Penguin** are **sentinel species** for warming in the Antarctic region.

- Studies project **population decline of up to 50% by the 2080s** due to warming.

Statement 1 is correct

- Sentinel species act as **early warning indicators** of ecosystem stress.

Statement 2 is not correct

- They are **not necessarily top predators**; they can be frogs, bees, fish, etc.

Statement 3 is correct

- Frogs are classic sentinel species due to **high sensitivity to pollutants**.

Statement 4 is not correct

- They are **highly sensitive**, not immune.

11. (b)

Statement 1 is not correct: Oak belongs to the **genus Quercus** in the **Fagaceae family** and generally thrive in **temperate climates**.

Statement 2 and 3 are correct: Oak forests assist watershed protection by promoting the recharge of springs.

- Their trees host lichens, bryophytes, pteridophytes (all three being moss-like plants), orchids, and other flowering plants, creating layered **microhabitats**.
- Birds and mammals such as jays, Himalayan langurs, red giant flying squirrels, and Asiatic black bears feed on oak leaves and acorns, often caching them for leaner periods.

12. (b)

Statement 1 is correct: NGT is a statutory body, established under the National Green Tribunal Act, 2010. It is a specialized body for fast-tracked handling of environmental and forest-related cases. It aims to ensure timely justice in environmental matters.

Statement 2 is not correct: The NGT is guided by principles of natural justice rather than the Code of Civil Procedure. This allows flexibility in handling cases efficiently. It enables quicker resolution of disputes.

Statement 3 is correct: The NGT handles civil cases regarding environmental rights and seven specific laws. It holds original, appellate, and suo motu powers.

- The Water (Prevention and Control of Pollution) Act, 1974,
- The Water (Prevention and Control of Pollution) Cess Act, 1977,
- The Forest (Conservation) Act, 1980,
- The Air (Prevention and Control of Pollution) Act, 1981,
- The Environment (Protection) Act, 1986,
- The Public Liability Insurance Act, 1991 and
- **The Biological Diversity Act, 2002.**

13. (b)

Statement 1 is correct: About 26.8% of forests reached record-low moisture and biomass levels, compared to only 11% in 2005. This shows a significantly higher proportion of affected forests in recent droughts. It reflects intensifying ecological stress.

Statement 2 is not correct: Recovery depends more on post-drought water availability than on drought severity. This indicates that recovery is influenced by subsequent conditions rather than initial intensity.

Statement 3 is correct: Recurrent droughts, occurring roughly in a 7-year cycle, may push the Amazon towards ecological thresholds. This weakens its role as a global carbon sink. It highlights long-term climate risks.

14. (c)

Context

- A Delhi court has convicted a Jaipur-based art gallery owner for attempting to illegally export Shahtoosh shawls.

About

- Shahtoosh Wool is derived from the hair of the **Tibetan Antelope**, also known as **Chiru**. The animal is killed to obtain the wool.
- Trade in Shahtoosh is strictly prohibited in India and has also been banned globally.

Tibetan Antelope (*Pantholops hodgsonii*)

- The Chiru is a **medium-sized bovid** endemic to the high-altitude alpine steppes of the **Tibetan Plateau (3,250–5,500m)**.
- **Habitat:** They inhabit the arid, cold grasslands of Tibet, Qinghai, and Xinjiang in China, with a small population in **Ladakh (Changthang belt), India**.
- **Appearance:** They have a pale fawn to a **reddish-brown coat** with a white belly. Males have black markings on their faces and legs, which are absent in females.
- **Conservation Status:** It is currently classified as **Near Threatened (NT)** on the IUCN Red List. It has been listed under
 - **Schedule I of the Wildlife (Protection) Act, 1972,**
 - Appendix I (prohibiting international trade) of **Convention on International Trade in Endangered Species (CITES) since 1975.**

15. (b)

In News : The Kankaria Coaching Depot in Ahmedabad has become India's first water-neutral railway depot by adopting innovative wastewater treatment and reuse systems

Kankaria Coaching Depot : India's first water-neutral railway depot

- It saves around 1.60 lakh litres of water daily and about 5.84 crore litres annually, reducing dependence on freshwater.
 - It uses **phytoremediation**, where plants help purify wastewater, followed by wetland treatment, carbon and sand filtration.
 - **Phytoremediation** : It is a process in which plants are used to clean contaminated soil, water, or groundwater by absorbing or breaking down pollutants like metals, pesticides, explosives, and oil.

16. (a)

Context: The first-ever national assessment titled “*State of India’s Bats, 2024–25*” has been released by the Nature Conservation Foundation, in collaboration with Bat Conservation International, World Wide Fund for Nature, and the Centre for Wildlife Studies, highlighting the status, diversity, and threats to bats in India.

Key Facts about Bats

- Bats are mammals belonging to the **order Chiroptera and are the only mammals capable of sustained powered flight**, with wings made of stretched skin over elongated finger bones.
- There are over 1,400 species of bats worldwide, constituting about **20% of all mammal species**. They inhabit almost every continent except Antarctica, thriving mainly in tropical regions.
- Bats are **crucial for ecosystems as pollinators** for many plants, agents of seed dispersal, and natural controllers of insect populations, including agricultural pests.
- **Most bats use echolocation**—high-frequency sound waves—for navigation and hunting in the dark, a unique adaptation that allows them to exploit nocturnal ecological niches effectively.
- **Unlike birds, bats cannot take off from the ground easily**; they hang upside down to launch into flight. They rest during daytime, often in caves or hollow trees, forming colonies that can range widely in size.
- The **Indian flying fox (*Pteropus giganteus*) is among the largest bats in India** and a critical species for pollination and ecosystem health.
- Bats are known **reservoirs of numerous viruses**, including coronaviruses, Nipah virus, and Ebola, yet they exhibit remarkable immunity and longevity which is a subject of scientific research.

17. (d)

Context: The Odisha government recently signed a memorandum of understanding with the National Centre for Coastal Research under the Union Ministry of Earth Sciences to launch a **Marine Spatial Plan (MSP)** in the state for integrated coastal and marine planning.

About

- Sustainable ocean planning has been underway in India since **2019**, with collaboration between **India and Norway**.
- In the first phase, it was taken up in two Union Territories, **Puducherry and Lakshadweep**.
- Odisha, with a coastline of over **550 km**, has become the **first state** in the country to implement MSP in the second phase.

What is the Marine Spatial Plan (MSP)?

- Marine Spatial Planning is a **tool for sustainable and integrated ocean management** aimed at boosting the Blue Economy and strengthening climate resilience.
- It enables the sustainable utilisation of marine resources across sectors such as ports, fisheries, aquaculture, tourism, and industry.

- Under the plan, **benthic mapping** is carried out to study underwater ecosystems. Parameters such as salinity and temperature are also analysed to identify suitable zones for tourism, fisheries, seagrass, seaweed cultivation, and other economic activities.

18. (b)

Context

- Earth Day is observed annually on **April 22** to promote environmental protection and sustainable practices.

About

- **History:** The idea of observing Earth Day was proposed by **Gaylord Nelson**, after environmental concerns gained prominence following incidents like the **Santa Barbara oil spill**.
 - Earth Day was first observed in **1970 in the United States** as a response to rising environmental degradation.
 - The **United Nations General Assembly** officially designated **22 April** as International Mother Earth Day through a resolution adopted in **2009**.
- **Theme for 2026:** "Our Power, Our Planet".

19. (b)

Context

- India designated **Shekha Jheel Bird Sanctuary in Uttar Pradesh** as its **99th** Ramsar Site, with Uttar Pradesh now having **12th** sites on the list.

About Shekha Jheel Bird Sanctuary

- It is a **freshwater** wetland ecosystem, formed by the **Upper Ganges Canal** in **Aligarh, Uttar Pradesh**.
- It is a key habitat for migratory birds on the **Central Asian Flyway** and wintering ground for species such as **Bar-headed Goose, Painted Stork** and **various species of ducks and waterfowl**.

India's Latest Additions in Ramsar site

- **Siliserh Lake (Rajasthan):** 95th Ramsar site
- **Kopra Jalashay (Chhattisgarh):** 96th Ramsar Sites
- **Patna Bird Sanctuary (Uttar Pradesh):** 97th Ramsar Sites
- **Chhari-Dhand Conservation Reserve (Gujarat):** 98th Ramsar Sites

What is the Ramsar Convention?

- A Ramsar site is a **wetland designated** as one of **international importance** under the Ramsar Convention.
- The Ramsar Convention is one of the oldest **inter-governmental accords** signed by member countries to preserve the ecological character of their wetlands of international importance.
- It was signed on **February 2, 1971** in **Ramsar, Iran** and came into force in 1975.
 - India became a signatory to the **Ramsar Convention in 1982**.

20. (b)

About Gangetic Dolphin

- The **Ganges river dolphin (Platanista gangetica)** is one of the world's few obligate freshwater dolphin species, officially described in 1801.
- It **inhabits the Ganga and Brahmaputra river systems** and their tributaries across India, Bangladesh, and Nepal.

- They are uniquely adapted to turbid river environments, the Gangetic dolphin lacks a crystalline eye lens rendering it functionally blind. It navigates and hunts entirely through a highly developed **echolocation system, emitting ultrasonic sounds to locate prey.**

21. (a)

Context

- Two of India's waste landfills are among the top 25 global emitters of methane in the waste sector, according to a study by the University of California, Los Angeles.

Why Landfills Emit Methane?

- Landfills release methane when organic waste decomposes in the absence of oxygen (anaerobic conditions), making unmanaged dumpsites major emission hotspots.

About Methane

- Methane is a potent greenhouse gas, responsible for nearly **30% of global warming** since the Industrial Revolution.
- Over a 20-year period, it is about **86 times more effective** at trapping heat than carbon dioxide.
- It remains in the atmosphere for a shorter duration (~12 years), but has a **high short-term warming impact.**

22. (b)

Statement 1 is not correct: E100 refers to fuel with **100% ethanol content** or near-100%, since small quantities of water improve combustion.

Statement 2 is correct: Flex-fuel vehicles are designed to **run on any mixture of ethanol and petrol**, from pure petrol to E100, with onboard sensors adjusting engine parameters accordingly.

23. (b)

In News : Recently ,The Tamil Nadu Forest Department has commenced the third synchronised survey of the Nilgiri Tahr, covering the species' entire range across the State.

Statements 1 and 2 are correct : Nilgiri tahr is the only mountain ungulate in southern India among the country's 12 such species and is the state animal of Tamil Nadu.

- There are multiple references to Nilgiri Tahr in the Sangam Tamil literature.
 - Two epics — Silappathikaram and Sivakasindamani — mention descriptions of the Nilgiri Tahr and its habitat.
- The Nilgiri tahr is found at high elevations on cliffs, grass-covered hills, and open terrain.
 - Nilgiri Tahr is now largely confined to isolated patches of suitable habitat in the states of Kerala and Tamil Nadu.
 - The Eravikulam National Park in Anamalai hills, Kerala, is home to the largest population of the Nilgiri tahr

Statement 3 is not correct : **Nilgiri Tahr** is classified as Endangered on the IUCN Red List and is protected under Schedule I of India's Wildlife (Protection) Act, 1972.

24. (d)

In News : Recently ,World Tapir Day was observed globally to raise awareness about tapirs, unique herbivorous mammals

Statements 1 and 2 are incorrect : Tapirs are large herbivorous mammals .

- Tapirs inhabit jungle and forest regions of **South America, Central America, and Southeast Asia.**

Types and IUCN Red List status

- Lowland Tapir (*Tapirus terrestris*) - Vulnerable
- Mountain Tapir (*Tapirus pinchaque*) - Endangered
- **Malay Tapir (*Tapirus indicus*) - Endangered**
- Baird's Tapir (*Tapirus bairdii*) -Endangered



MISCELLANEOUS

1. With reference to the International Booker Prize, consider the following statements:
 1. It is awarded annually for a work originally written in English and published in the United Kingdom.
 2. The prize money of £50,000 is shared equally between the author and the translator.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
2. The Sendai Framework, recently seen in the news, is primarily aimed at:
 - (a) Climate change mitigation through reduction of greenhouse gas emissions
 - (b) Disaster risk reduction and resilience building
 - (c) Biodiversity conservation and ecosystem restoration
 - (d) Sustainable urban transport systems
3. Consider the following statements regarding the BioNEST Incubation Centre:
 1. It supports food bioprocessing and biotechnology research along with scale-up validation and regulatory support.
 2. Its primary objective is to convert scientific research into market-ready products.
 3. It is exclusively focused on pharmaceutical drug manufacturing.How many of the statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
4. The Manhattan Principles, seen in the news, are primarily related to:
 - (a) Climate change mitigation and carbon markets
 - (b) Nuclear non-proliferation and disarmament
 - (c) Global trade liberalisation under World Trade Organization
 - (d) Linkages between human, animal, and ecosystem health
5. The term “Madman Theory” in international relations refers to a strategy where a leader:
 - (a) Publicly declares war to gain domestic support
 - (b) Deliberately projects an image of irrationality to coerce adversaries into concessions
 - (c) Uses economic sanctions as a substitute for military action
 - (d) Builds nuclear capability to achieve regional dominance
6. “Methanol bunkering,” recently in the news, refers to which of the following?
 - (a) Underground storage of methanol as a strategic petroleum reserve
 - (b) Transfer of methanol fuel to a ship from a bunkering facility

- (c) Industrial process of extracting methanol from biomass in port areas
(d) Blending of methanol with diesel for use in port-based power generation
7. Project Glasswing, recently seen in news is related to;
- (a) An initiative to regulate cryptocurrencies by International Monetary Fund
(b) A climate financing mechanism developed by World Bank
(c) A cybersecurity initiative using Artificial Intelligence to secure critical software
(d) A global child welfare initiative launched by UNICEF
8. India's first indigenous Quantum Test and Reference Facilities are being established in which state?
- (a) Karnataka (b) Tamil Nadu
(c) Telangana (d) Andhra Pradesh
9. Linux, recently seen in the news, is
- (a) A satellite navigation system
(b) An open-source operating system
(c) A newly developed artificial intelligence Model
(d) A defence exercise
10. With reference to Project Him Sarovar, recently in the news, consider the following statements:
1. It has been launched in the Union Territory of Ladakh to address water scarcity.
 2. The project focuses on large-scale river interlinking to ensure water availability.
 3. It will address water scarcity, boost irrigation, and enhance climate resilience in the region.
- Which of the statements given above are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
11. CAFE III norms, recently seen in the news, are related to:
- (a) Regulation of corporate tax rates for automobile companies
(b) Standards for fuel efficiency and emission reduction in passenger vehicles
(c) Safety standards for electric vehicle batteries
(d) Guidelines for foreign investment in the automobile sector
12. The Food Waste Index Report is released by:
- (a) Food and Agriculture Organization (FAO)
(b) United Nations Environment Programme (UNEP)
(c) World Food Programme (WFP)
(d) World Bank
13. Consider the following statements regarding the recently established Borrowers' Platform:
1. It serves as an exclusive forum for debt restructuring among developing nations.
 2. Its Secretariat is housed under UN Trade and Development (UNCTAD).
 3. India is among its founding members.

Which of the statements given above is/are correct?

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

20. With reference to anti-doping framework in India, consider the following statements:

1. The National Anti-Doping Agency operates under the Ministry of Youth Affairs and Sports.
2. India is a signatory to the UNESCO International Convention Against Doping in Sport.

Which of the statements given above is/are correct?

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

21. Project DANTAK is related to:

- (a) Defence cooperation between India and Sri Lanka
- (b) Infrastructure development, particularly road construction, in Bhutan
- (c) Educational exchange programmes in South Asia
- (d) Conservation of elephants in the Eastern Himalayas

22. Consider the following statements regarding the Kuki–Naga conflict:

1. The conflict is primarily rooted in issues of identity and land ownership.
2. It first emerged after the Kuki–Meitei conflict in 2023.
3. Colonial policies contributed to the institutionalisation of ethnic divisions in the region.

Which of the statements given above are correct?

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

23. The “Atlas” (Atelasi) drone swarm system, recently seen in the news, has been developed by which country?

- (a) United States (b) China
(c) Russia (d) India

24. Which of the following statements is correct about Geophagy?

- (a) It is the practice of eating clay or soil
- (b) It refers to the practice of consuming raw meat
- (c) It is practice of drinking saline water
- (d) It refers to the practice of eating fermented food

25. Ru-Soam engineering, recently seen in the news, is best associated with:

- (a) Traditional irrigation systems in arid regions
- (b) Indigenous bamboo and cane bridge construction
- (c) Stone temple architecture in the Himalayas
- (d) Coastal fishing techniques using wooden rafts

EXPLANATIONS

1. (b)

Context

- Six books have been shortlisted for the International Booker Prize 2026 that would be announced on May 19, 2026.

About the Prize

- Formerly known as the **Man Booker International Prize**, this honor is presented annually for a work of fiction, either a novel or a collection of short stories that was originally written in a language other than English, then translated into English and published in the U.K. and/or Ireland.
- The prize highlights the crucial role of translators, with **£50,000 shared equally between the author and translator**.
- Each shortlisted book receives **£5,000**, also split equally between author and translator.
- **Past Winner:** In 2025, *Heart Lamp* by Banu Mushtaq, translated by Deepa Bhashti, won the prize. It was the first book translated from Kannada to receive this honor.

2. (b)

Context

- The India Meteorological Department (IMD) received the National Award for e-Governance 2025 for its indigenously developed Multi-Hazard Early Warning Decision Support System (MHEW-DSS).

Do you Know?

- IMD was established in 1875 and completed 150 years of service in 2025.
 - IMD functions under the Ministry of Earth Sciences
- India is a Regional Specialised Meteorological Centre (RSMC) for the North Indian Ocean, responsible for cyclone tracking and naming.
- **Mission Mausam** is the overarching framework under which MHEW-DSS was developed
- The **Sendai Framework for Disaster Risk Reduction 2015–2030** is a **non-binding international agreement** adopted at the Third UN World Conference on Disaster Risk Reduction, held in Sendai, Japan, on March 18, 2015.
 - It is the primary global framework guiding how nations reduce disaster risk, build resilience, and protect development gains from natural and human-induced hazards over the 15-year period from 2015 to 2030.

3. (b)

Statement 1 is correct: The BioNEST centre supports food bioprocessing and biotechnology research. It also provides scale-up validation and regulatory support to startups. This indicates a comprehensive incubation ecosystem.

- **Statement 2 is correct:** The main goal of the centre is to convert scientific research into market-ready products. It bridges the gap between innovation and industry application.
- **Statement 3 is not correct:** The focus areas include **nutraceuticals, fermentation, CRISPR technologies and botanicals**. The scope is broader within biotechnology and food-related sectors.

4. (d)

Context

- The rising incidence of zoonotic diseases and antimicrobial resistance has highlighted the need for a coordinated One Health approach to address human, animal, and environmental health risks.

Evolution of the Concept of One Health

- The concept gained prominence during the **outbreak of Severe Acute Respiratory Syndrome in 2003–04**.
 - It was further strengthened during the spread of **Avian Influenza H5N1**.
- **The Manhattan Principles** formally recognised the linkages between human and animal health and their implications for global economies and food security.
- Scientific evidence over time has shown that;
 - Nearly **75%** of emerging infectious diseases are zoonotic.
 - **Anthropogenic factors** such as land-use change, urbanisation, and global trade drive disease emergence.

5. (b)

About Madman Theory

- The **Madman Theory is a foreign policy and strategic doctrine** in which a leader deliberately cultivates an image of being unpredictable, irrational, or willing to take extreme action, with the aim of making adversaries believe that escalation including war or even nuclear confrontation is possible.
- The term is most closely **associated with Richard Nixon** and his National Security Adviser Henry Kissinger during the Cold War, particularly in the context of the **Vietnam War**.
- The theory fundamentally functions through psychological signalling, focusing on shaping the adversary's perception rather than on immediate military action.
- In the short term, it can **strengthen deterrence and crisis diplomacy if the threat is believed**; however, over the long term, it risks **reducing trust among allies and weakening a country's reputation** as a stable and reliable global actor.

6. (b)

Kandla Port Advances Methanol Bunkering marking step toward Green Maritime Transition. Bunkering in maritime terms means refuelling ships. So, "methanol bunkering" refers to the supply/transfer of methanol fuel to ships at ports. Methanol is the simplest member of the alcohol group of organic compounds; it is water-soluble and easily biodegradable. Commonly referred to as wood alcohol, it possesses chemical and physical properties as a fuel that are similar to those of ethanol.

7. (c)

Context

- Anthropic has launched Project Glasswing, a global cybersecurity initiative linked to its advanced AI model Claude Mythos.

What is Project Glasswing?

- Project Glasswing is a global cybersecurity initiative led by **Anthropic**.
- It is a **consortium of around 40 global technology firms** and open-source contributors aimed at securing critical digital infrastructure, using advanced Artificial Intelligence.

- The project **provides early access to the Claude Mythos model** to selected partners. It is backed by;
 - \$100 million in AI usage credits,
 - \$4 million support for open-source security.
- **Major participating firms include:** Amazon Web Services, Apple, Google, Microsoft, NVIDIA etc.

8. (d)

Context

- Andhra Pradesh is set to launch India's first indigenous Quantum Test and Reference Facilities under the Amaravati Quantum Valley project on April 14 (World Quantum Day).

About

- Two quantum computer test beds—1S and 1Q—will be established at SRM University, Amaravati and Medha Towers, Gannavaram, respectively.
- The Quantum Reference Facility will enable testing and certification of quantum hardware, ensuring reliability of quantum systems.
- These systems operate at temperatures close to **minus 273°C (near absolute zero)** for precise evaluation of quantum components.

9. (b)

Context

- France is replacing Windows with Linux for nearly **2.5 million** civil servants.

About

- This reflects a push for **digital sovereignty**—control over a country's data, software, and digital infrastructure.
- Developed by Linus Torvalds in 1991, Linux is an open-source operating system that reduces dependence on proprietary foreign software, enhances data security, and lowers long-term costs.

10. (c)

Statement 1 is correct: Project Him Sarovar has been launched in **Ladakh**.

- **Aim:** The project aims at **scientific snow harvesting** and the creation of water bodies to address the pressing challenge of water scarcity in Ladakh.

Statement 2 is not correct: The project will build **storage ponds** to collect melting snow and glacial water.

- These ponds will support irrigation and rural water needs.

Statement 3 is correct: Significance:

- This will help boost **local livelihoods and agriculture** in the region.
- It will address **water scarcity, boost irrigation, and enhance climate resilience in the region**.

11. (b)

Context: The **Corporate Average Fuel Efficiency (CAFE) III norms** are proposed to be implemented from April 1, 2027, to March 31, 2032, with stricter fuel efficiency requirements for automobile manufacturers.

About CAFE Norms

- Corporate Average Fuel Efficiency or CAFE norms were first introduced in **2017** under the **Energy Conservation Act, 2001**, as part of India's efforts to curb fossil fuel dependence and air pollution from road transport.

- Issued by the **Bureau of Energy Efficiency (BEE)**, the fuel efficiency regulations apply to **M1 category vehicles**—passenger cars with seating for up to nine persons and a maximum weight of 3,500 kg.
- The regulations set limits on corporate average fuel consumption, measured in litres per 100 kilometres, based on the average weight of vehicles sold by an automaker during a financial year.
- Since fuel consumption and carbon dioxide (CO₂) emissions are directly linked, the rules aim to reduce carbon intensity by pushing companies to improve the efficiency of their overall fleet.
- **Phases of CAFE Norms:**
 - The first phase, implemented in 2017–18, capped average fuel consumption at 5.5 litres/100 km and emissions at <130 gm CO₂/km.
 - The second phase, in force since 2022–23, tightened this to 4.78 litres/100 km and <113 gm CO₂/km.
 - The third iteration, CAFE III (or CAFE 2027), proposes to reduce permissible fuel consumption to a range of 3.72–3.01 litres/100 km, with emissions expected to fall below 91.7 gm CO₂/km.

12. (b)

Context: According to the United Nations Environment Programme, India wastes **78–80 million tonnes** of food annually, **valued at ₹1.55 lakh crore**, making it the **second-largest** food waste globally.

Status of food wastage in India

- **As per UNEP Food Waste Index Report 2024**, the estimated food wastage in India in 2022 is 55 kg/capita/year in India, lower than the global average of 79 kg/capita/year.
- **Concern:** India ranks **102 out of 123** countries in the **Global Hunger Index 2025**.
 - Around **12%** of India's population is **undernourished**, which is approximately **~170–175 million** people.
- Globally **1.05 billion tonnes** of food is wasted each year. Around **60%** of food waste occurs at the household level, followed by **food services (28%)** and **retail (12%)**.

13. (b)

Statement 1 is not correct: The Borrowers' Platform is not exclusively meant for debt restructuring. Its broader aim is to enhance coordination, information sharing, and collective voice of borrowing countries in global financial discussions. It is not a formal restructuring mechanism like creditor clubs.

Statement 2 is correct: The Secretariat support is provided by UN Trade and Development (UNCTAD).

Statement 3 is correct: India is a founding member, reflecting its role in shaping global financial governance reforms.

Statement 4 is correct: Egypt currently holds the Chairmanship, highlighting leadership from the Global South.

14. (b)

The Lausanne Declaration (1999) emerged from the World Conference on Doping in Sport held in Lausanne, Switzerland. Its most important outcome was the decision to establish an independent global body to fight doping.

- It directly led to the formation of the World Anti-Doping Agency (WADA) in 1999.
- WADA was created to harmonise anti-doping policies, rules, and regulations across countries and sports organisations.

15. (b)

Context: Operation Numkhor, a nationwide crackdown on vehicle smuggling and forged registration rackets, is likely to be discussed in the upcoming Indo–Bhutan Joint Customs Group meeting.

About Operation Numkhor

- Launched by the **Customs (Preventive) Commissionerate, Kochi** in September 2025.
- Targets the **smuggling of premium second-hand vehicles via Bhutan** and the use of forged registration documents, allegedly involving Motor Vehicle Department (MVD) officials.
- Involves **state-wide raids and seizures** across multiple states.

16. (d)

Context

- N. Alim Yusuf, a botanist from Malabar Botanical Garden and Institute for Plant Sciences, has received the **World Wide Fund for Nature National Award** for developing an application to **detect invasive plant species in Kerala**.

About the Innovation

- The application, **Neophyte ID**, is an AI-powered mobile tool that enables users to identify invasive plant species by capturing images.
- It is built using the advanced machine learning model **YOLOv11**, which allows real-time object detection.
- The app can **identify nearly 100 invasive plant species** found in Kerala.
 - It is available in **Malayalam and English**, making it accessible to local communities.
 - It integrates **geospatial tracking** to map the **spread of invasive species**, aiding scientific research and policy intervention.

17. (d)

World Economic Outlook Report

- The World Economic Outlook (WEO) is the **International Monetary Fund's** key report on global economic trends and policy challenges.
- **Published twice a year** it provides projections for the near and medium term, covering advanced, emerging, and developing economies.

18. (c)

Statement 1 is correct: The Breakthrough Prizes were established in 2012 by leading figures such as Yuri Milner and others. They aim to recognise transformative contributions in fundamental sciences. The prizes are considered among the most prestigious global science awards.

Statement 2 is correct: The prizes cover three major fields—life sciences, fundamental physics, and mathematics. These disciplines represent core areas of scientific advancement. The awards recognise breakthroughs with significant impact.

19. (a)

In News: The resumption of Russian oil flows through the Ukrainian section of the **Druzhba pipeline** has prompted Hungary to lift its veto on a **critical €90 billion EU loan to Ukraine**.

About

- The **Druzhba (“Friendship”) pipeline** is one of the world’s longest crude oil pipeline networks, serving as the primary overland energy artery connecting Russian oil fields to refineries across Central and Eastern Europe.
- **Constructed by the Soviet Union**, the pipeline became operational in 1964 with the explicit purpose of integrating the economies of Eastern Europe with Soviet energy supply, primarily serving member states of the **Council for Mutual Economic Assistance (COMECON)**, the Soviet-era economic bloc.
- The pipeline originates in the **Almetyevsk region of central Russia**, where crude flows converge from Siberia, the Urals, and the Caspian Sea. It then passes through Belarus before splitting into two major branches:
 - Northern Branch → Poland → Germany
 - Southern Branch → Ukraine → Hungary → Slovakia → Czech Republic

20. (c)

Context: The Athletics Integrity Unit Board has **downgraded the Athletics Federation of India** over **“extremely high” doping risks among athletes**, potentially affecting India’s 2036 Olympics hosting bid.

Anti Doping Agency in India

- The primary organization responsible for anti-doping efforts in India is the **National Anti-Doping Agency (NADA)**.
 - NADA was established in **2005** under the Societies Registration Act to promote, coordinate, and monitor the doping control program in sports in India.
 - NADA operates under the **Ministry of Youth Affairs and Sports**, Government of India.
- **Indian Olympic Association (IOA) Medical Commission:** The IOA Medical Commission is an advisory body whose purpose is to provide advice to the IOA Executive and office on matters related to the health and wellbeing of athletes, and the medical services to be provided to the national team participating in the Olympic Games, Youth Olympic Games, Asian Games and Commonwealth Games.
- **National Anti-Doping Act, 2022:** It is the first standalone anti-doping law in India.
 - It ensures compliance with the World Anti-Doping Agency (WADA) Code.
 - Grants powers for search, seizure, and disciplinary action.
 - Provides an appeal mechanism (National Anti-Doping Disciplinary Panel & Appeal Panel).
 - Enables education and research initiatives on doping.
- India is a signatory to the **UNESCO International Convention Against Doping in Sport**.

21. (b)

In News: Project DANTAK celebrated its Raising Day marking 65 years of its continuous service in Bhutan since 1961.

Project DANTAK

- Project DANTAK was established on 24 April 1961 through the vision of His Majesty the Third King of Bhutan and then Indian Prime Minister Jawaharlal Nehru to improve Bhutan’s connectivity and support its socio-economic development.
- It was assigned the task of building the country’s first motorable roads.
 - By 1968, it had completed key routes, including the Samdrup Jongkhar–Trashigang road and the Phuentsholing–Thimphu highway.
- It is led by the Border Roads Organisation (BRO).

22. (a)

Statement 1 is correct: The conflict is driven by identity, land ownership, and competing political aspirations. These factors shape inter-ethnic tensions in the region.

- **Statement 2 is incorrect:** The Kuki–Naga conflict emerged strongly in the early 1990s, much before the Kuki–Meitei conflict of 2023.
- **Statement 3 is correct:** Colonial “divide and rule” policies institutionalised ethnic divisions. This contributed to long-term tensions between communities.

23. (b)

In News: Recently, Chinese People’s Liberation Army (PLA) launched its **new Atlas drone swarm system (atelasi)**.

“Atlas” (or Atelasi) drone swarm system

- It is a Chinese PLA mobile platform designed to launch and control large numbers of drones in coordinated operations from a single operator interface.
- It is a truck-based swarm warfare unit made up of three vehicles: a launch vehicle (Swarm-2), a command/control vehicle, and a support vehicle.
 - Together, they function as a compact, mobile “drone battlefield node.”
- Compared to systems like the US “Perdix” and DARPA’s “Offset,” which focus mainly on the number of drones deployed, the Atlas system is presented as more advanced due to its emphasis on coordinated intelligence rather than scale alone.

24. (a)

In News: Barbary macaques in Gibraltar have been found to eat soil (geophagy) more often than other populations.

Geophagy is the widespread behavior of eating soil, clay, or earth substances like chalk or kaolin.

- It is observed across many animal groups and also among some human populations, especially in tropical regions.
- It is found in many cultures worldwide but especially common in parts of Africa, among pregnant women, children, and rural populations.

25. (b)

Ru-Soam engineering refers to the traditional practice of constructing footbridges using bamboo and cane by the Lepcha community of Sikkim. These bridges are made entirely from locally available, renewable materials and reflect sustainable indigenous knowledge, particularly in regions like the Khangchendzonga Biosphere Reserven.

