

DAILY MCQs COMPILATION *with* **EXPLANATIONS**

MARCH, 2025

NEXT IAS

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HISTORY, ART & CULTURE

1. He is the only Indian to have received both the Bharat Ratna and Pakistan's highest civilian award, Nishan-e-Pakistan. He has also served as the Prime Minister of India.

Which of the following personalities has been described above?

- (a) Atal Bihari Vajpayee (b) Lal Bahadur Shastri
(c) Morarji Desai (d) Inder Kumar Gujral

2. Consider the following statements:

1. Amir Khusrau was the most beloved disciple of the Chishti Shaikh Nizamuddin Auliya.
2. Ghiyasuddin Tughlaq bestowed upon Khusrau the title of 'Amir'.

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. Consider the following statements regarding the Battle of Karnal (1739):

1. The battle was fought between Nadir Shah of Persia and Mughal Emperor Muhammad Shah.
2. The Mughal army was numerically superior but lacked discipline and modern warfare tactics.
3. Nadir Shah captured and looted Delhi, taking the Peacock Throne and the Koh-i-Noor diamond.

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

4. With reference to Dholavira, which of the following statements is/are correct?

1. It is sited on the arid island of Khadir in the Kachchh district, Gujarat.
2. It was inscribed as India's 40th UNESCO World Heritage Site in 2021.

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. In Sufism, the term "Tariqa" refers to:

- (a) A Sufi saint
(b) A spiritual path or order
(c) A Sufi lodge or retreat for spiritual practices
(d) Meditation or contemplation on God's presence

6. The present-day Somnath Temple was reconstructed in which architectural style?
 (a) Dravidian (b) Chalukya
 (c) Nagara (d) Vesara
7. Consider the following statements:
 1. During the Paleolithic Age, humans were hunter-gatherers, using stone tools for hunting, butchering, and food processing.
 2. The Mesolithic Age is marked by the adoption of agriculture, animal domestication, and settled communities.
 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 Indian festivals, Consider the following pairs :
- | Festivals | State |
|----------------|-----------------|
| 1. Kathi Bihu | : Assam |
| 2. Shigmo | : Uttar Pradesh |
| 3. Jadayaswamy | : Tamil Nadu |
- How many of the above pairs are correctly matched?
 (a) Only one pair (b) Only two pairs
 (c) All three pairs (d) None of the pairs
9. Which of the following best describes Geet Gawai?
 (a) A classical dance form of North India performed during Holi.
 (b) A form of folk storytelling popular in Maharashtra.
 (c) A pre-wedding ceremony performed by Bhojpuri-speaking communities in Mauritius.
 (d) A harvest festival celebrated in Nepal by the Indian diaspora.
10. Which of the following statements are correct about Menhir?
 (a) It is a style of painting practiced in the Mithila region.
 (b) It is a large upright stone, typically tapered at the top.
 (c) It is the rising tower at the entrance of a temple.
 (d) It is the largest Buddhist stupa in South India.
11. With reference to traditional dance forms, Consider the following pairs :
- | Dance form | State |
|------------------|---------------|
| 1. Gomira Dance | : West Bengal |
| 2. Gotipua dance | : Gujarat |
| 3. Seethakali | : Kerala |
- How many of the above pairs are correctly matched?
 (a) Only one pair (b) Only two pairs
 (c) All three pairs (d) None of the pairs
12. The Yaoshang festival, recently seen in the news, is primarily associated with which of the following states?
 (a) Assam (b) Nagaland
 (c) Manipur (d) Meghalaya

13. He formed a council of eight ministers called the Ashtapradhna, drawing inspiration from ancient Indian political texts like Mahabharata and Sukraniti. He ensured financial unity by adopting Malik Ambar's land revenue system, which classified land based on fertility and fixed government shares. He encouraged agriculture and the prosperity of peasants by eliminating oppressive feudal lords. His judicial system gave a great deal of autonomy to local panchayats, ensuring fair trials and promoting justice at the grassroots level.

Who among the following personalities described above ?

- | | |
|-------------------------|------------------------|
| (a) Chandragupta Maurya | (b) Prithviraj Chauhan |
| (c) Rana Sanga | (d) Shivaji Maharaj |

14. Consider the following pairs:

Features	Locations
1. Mudumal Menhirs	Tamil Nadu
2. Hire Benekallu	Karnataka
3. Vibhutihalli	Kerala

How many of the above pair(s) is / are correctly matched?

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

15. Consider the following pairs:

Puppetry Type	State
1. String Puppets (Kathputli)	Rajasthan
2. Shadow Puppetry	Assam
3. Rod Puppetry	West Bengal

Which of the pairs given above is/are correctly matched?

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

16. He ruled for nearly 50 years, longer than any other Mughal Emperor, reinstated the jizya tax on non-Muslims, and ordered the destruction of temples, including the Kashi Vishwanath Temple.

Which of the following personalities has been described above?

- | | |
|-----------|---------------|
| (a) Akbar | (b) Aurangzeb |
| (c) Babur | (d) Jahangir |

17. The Kaliyattam festival, recently seen in the news, is mainly associated with which of the following states?

- | | |
|--------------------|---------------|
| (a) Tamil Nadu | (b) Telangana |
| (c) Andhra Pradesh | (d) Kerala |

18. In the context of the Muzhara Movement, who were the Muzharas?

- (a) Elite landlords who owned large estates
- (b) Tax collectors appointed by the British
- (c) Tenant farmers demanding ownership rights
- (d) Soldiers recruited from princely states

19. Shaheed Diwas (Martyrs' Day), observed on 23rd March, is dedicated to the memory of Indian freedom fighters who sacrificed their lives for the country's independence. Which of the following statements about the events related to 23rd March 1931 is incorrect?
- Bhagat Singh, Rajguru, and Sukhdev were hanged on 23rd March 1931.
 - They sought to avenge Lala Lajpat Rai's death who protested against the Simon Commission.
 - The three were arrested and tried for killing Police Superintendent James A. Scott.
 - The hanging of these revolutionaries sparked protests across India.
20. Consider the following statements about Vikramshila University:
- It was founded by King Gopala of the Pala Dynasty.
 - It became an important centre for Tantric studies in both Buddhist and Hindu traditions.
 - Atisa Dipankara, a noted Buddhist scholar, was associated with Vikramshila.
- Which of the statements given above are correct?
- 1 and 2 only
 - 2 and 3 only
 - 1 and 3 only
 - 1, 2 and 3
21. The Third Battle of Panipat (1761) was fought between:
- The Marathas and the Durrani Empire
 - The Marathas and the British East India Company
 - The Mughals and the British East India Company
 - The Sikhs and the Marathas
22. The First Battle of Panipat (1526) was fought between:
- Rana Sanga and Humayun
 - Babur and Ibrahim Lodi
 - Humayun and Sher Shah Suri
 - Bahlul Lodhi and Rana Sanga

EXPLANATIONS

1. (c)

Context: Lok Sabha Speaker Om Birla paid floral tributes to former Prime Minister Morarji Desai on his birth anniversary.

About: Morarji Desai

- He was born on **29 February 1896** at Bhadeli near Bulsar in Gujarat.
- He was an independence activist who served as the **fourth Prime Minister of India** (1977–79). He also became the first non-Congress Prime Minister of India.
- He is the only Indian to **have received both** the Bharat Ratna and Pakistan's highest civilian award, Nishan-e-Pakistan.

2. (a)

Statement 1 is correct: Amir Khusrau was the most beloved disciple of the **Chishti Shaikh Nizamuddin Auliya**.

- He started out in the service of princes and nobles, before becoming a permanent fixture in the **court of the Delhi Sultan**.
 - In mediaeval Islamic culture, praise poetry** was one of the principal means for a ruler to establish and **propagate his cultural and political legitimacy**.

Statement 2 is not correct: Khusrau served at least five Sultans — Muizuddin Qaiqabad, Jalaluddin Khalji, Alauddin Khalji, Qutbuddin Mubarak Shah, and Ghiyasuddin Tughlaq.

- **Sultan Jalaluddin Khalji** bestowed upon Khusrau the **title of 'Amir'**.
 - He also bestowed him with the **sobriquet of Tuti-yi-Hind**, the **'Parrot of India'**, title.

3. (d)

The Battle of Karnal on **February 24, 1739** marked a pivotal moment in Indian history, signaling the beginning of the end for the Mughal Empire.

Do you know?

- Nadir Shah was the founder of the Afsharid dynasty of Iran.
- Nadir Shah was a military genius, who had already defeated multiple powers before turning his attention to India.
- After conquering Kandahar, he crossed the Khyber Pass and swiftly took control of Mughal vassal states, heading towards Delhi.

The Battle of Karnal

- Nadir Shah's army defeated Mughal Emperor Muhammad Shah 'Rangila' (within 3 hours).
- The Mughal army, 300,000 strong, was outclassed by Nadir Shah's smaller but more disciplined force of 55,000.
- Nadir Shah's modern tactics and weaponry, including mounted musketeers, decisively defeated the Mughal cavalry.
- Nadir Shah captured and plundered Delhi, taking the Peacock Throne and the Koh-i-noor diamond.

Impact on the Mughal Empire

- Nadir Shah spared Muhammad Shah's life and restored most of his territory.
- Despite this, the Mughal Empire was left severely weakened, and its power declined over the next century.
- Nadir Shah left Delhi with almost empty coffers, weakening the Mughal's control over their empire.
- Over the next century, the Mughal Empire ceded more territory and power, eventually leading to British rule by 1857.

4. (c)

Context The President of India visited the UNESCO World Heritage Site Dholavira in Gujarat.

About Dholavira

- **Discovery:** Discovered in 1968 by archaeologist Jagat Pati Joshi.
- **Location:** Dholavira, the southern centre of the Harappan Civilization, is sited on the arid island of Khadir in the Kachchh district, Gujarat.
 - Lies on the **Tropic of Cancer**.
- **Historical Significance:** It is the 6th largest Harappan site and flourished between **3000-1500 BCE**.
- **UNESCO Recognition:** It was inscribed in **2021** as India's **40th World Heritage Site**.

5. (c)

Context: Prime Minister Narendra Modi attended the **Sufi music festival, Jahan-e-Khusrau 2025**.

Terms Related to Sufism

- **Tariqa:** Spiritual path or order followed by Sufi practitioners.
- **Pir:** A saint.
- **Sheikh (Murshid):** Spiritual guide or teacher in Sufism.
- **Murid:** A disciple or follower of a Sufi order.

- **Khanqah:** A Sufi lodge or retreat for spiritual practices.
- **Qalb:** The heart, spiritual center of understanding.
- **Wali:** A saint or friend of God.
- **Muraqaba:** Meditation or contemplation on God's presence.

6. (b)

The Somnath Temple, located in Prabhas Patan near Veraval in Saurashtra, Gujarat, is one of the **twelve Jyotirlingas of Lord Shiva** and holds immense religious and historical significance. The temple has been **destroyed and rebuilt multiple times due to invasions**, with the first major attack by **Mahmud of Ghazni in 1025 AD**. The temple follows the **Chalukya style of Hindu temple architecture** and features intricate carvings and a grand 50-meter tall Shikhar. The temple is situated at the **Triveni Sangam, the confluence of the Kapila, Hiran, and Sarasvati rivers**. An inscription on the temple wall states that there is no landmass between Somnath and the South Pole, making it a site of unique geographical significance.

7. (a)

Statement 1 is correct: Stone Age: It is a prehistoric period marked by the use of stone tools, divided into **three major periods: Paleolithic, Mesolithic, and Neolithic**.

- **Paleolithic Age:** Also known as the Old Stone Age.
 - Began around 2.6 million years ago and lasted until around 10,000 BCE.
 - **Humans were hunter-gatherers, using stone tools for hunting, butchering, and food processing.**

Statement 2 is not correct: Mesolithic Age: Occurred between 10,000 BCE and 5,000 BCE (varies by region).

- **Characterized by specialized tools, environmental adaptations, and the early domestication of plants and animals.**
- **Neolithic Age:** Began around 12,000 years ago and ended between 4500 BCE and 2000 BCE.
 - **Marked by the adoption of agriculture, animal domestication, and settled communities.**
 - Led to the development of pottery, weaving, and complex social structures.
 - Agriculture revolutionized human societies and led to the rise of civilizations.

8. (b)

Jadayaswamy Festival

- The **Badagas community (aboriginal Tribes)** of the Nilgiris celebrate the **Jadayaswamy festival** at **Jackanarai village** near Kotagiri in **Tamil Nadu**.
 - The Badagas live in villages, called "**Hattis**".
 - Badaga people speak the language called "**Badugu**".
- The festival is dedicated to **Jadayaswamy**, a deity revered by the Badagas. It symbolizes **faith, devotion, and the preservation of ancestral traditions**.

Kathi Bihu

- Kathi Bihu is marked annually on the first day of the Kati month in the **Assamese calendar**. The festival is also known as Kongali Bihu.
- **Significance:** It marks a crucial phase of the year for every farmer's family in Assam - the fresh start of the harvest season and the relocation time of rice saplings.

Shigmo Festival

- Shigmo festival is the spring festival in **Goa**.
- The festival begins with the installation of the 'ghumot', a traditional Goan percussion instrument, which is considered to be a symbol of cultural heritage and identity.

9. (c)

Geet Gawai is a pre-wedding ceremony that integrates rituals, prayers, songs, music, and dance. It is performed before Hindu weddings, particularly among Bhojpuri-speaking communities of Indian descent in Mauritius. It was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity in December 2016.

10. (b)

In News : The Mudumal megalithic menhirs in Telangana's Narayanpet district will soon be the second UNESCO World Heritage Site in the state following a nomination in 2025.

- **Menhirs are upright, man-made, large stones**, typically tapered at the top.
- The largest known menhir is the Grand Menhir Brisé in France, once 20.6 meters tall.
- **Historical Linkages :** The word "menhir" comes from the Brittonic words "maen" (stone) and "hîr" (long).
 - It was first used by French military officer and Celticist antiquarian Théophile Corret de la Tour d'Auvergne.

11. (b)

Context

- Artists performed the 'Gomira' dance during the Chanchala Kali Mata Puja in West Bengal.

About

- The Gomira **masked dance** is a traditional folk performance primarily practiced by the **Rajbongshi and Polia** communities of North Bengal.
- It is influenced by **Mahayana Buddhism, Tantric Buddhism, and Shaivite and Shakta** traditions. The dance emerged from a fusion of these spiritual influences.
- **Masks:** The masks used in the dance are made from various materials like papier mache, sholapith, bamboo, wood, sponge wood, clay, and paper.
- **Performance Style:** The Gomira dance is performed to the rhythmic beats of traditional percussion instruments like **Dhak and Kansar**.
- **Sequence of Performance:** The dance begins with **Bura-Buri** (Shiva and Parvati in disguise), followed by **Samsan Kali, Masan Kali, Dakini, Yogini, and Bagha** (Tiger demon) and Ends with **Narasimha Avatar**, Vishnu's lion-faced incarnation.

Seethakali

- Seethakali is believed to have originated at Perinad in Kollam district of **Kerala**.
- It is a centuries-old **Dravidian dance form** which is a blend of songs, storytelling and fast movements.
- This art form was first performed some 150 years back by the people of **Vedar** and **Pulayar** communities. The folk art form was a part of **Onam festivities** in the past.

Gotipua dance

- It is a traditional dance form in the state of **Odisha**, and the precursor of Odissi classical dance.
- The dance is **executed by a group of boys** who perform acrobatic figures inspired by the life of Radha and Krishna.
 - They **dress as women** to praise Lord Jagannath and Lord Krishna.

12. (c)

Context: The Yaoshang festival brought a sense of hope and celebration in Manipur after a year-long pause due to the unrest in the state since May 2023.

About

- **Yaoshang** is a **five-day festival** celebrated in Manipur during the **full moon of Lamta** (February-March), coinciding with **Holi**.
- It begins with the **burning of a straw hut** and children collecting donations.
- A key highlight is **Thabal Chongba**, a **moonlit folk dance**.
- The festival also includes **color play**, similar to Holi, with a special **Pichkari day** on the second day.

13. (d)

In News: Maharashtra Chief Minister Devendra Fadnavis inaugurated the first grand temple dedicated to **Chhatrapati Shivaji Maharaj** in Bhiwandi, Thane.

About

- In 1674, Shivaji Maharaj crowned himself at Raigad, marking the beginning of the 'Rajyabhisheka Era'. He aimed to sever ties with the Mughal Empire, introducing new coinage and regal symbols.
- Drawing from ancient Indian political texts like the Mahabharata and Sukraniti, Shivaji formed the **Astapradhan**, a council of eight ministers, to help govern his state and revive Hindu political traditions.
- Shivaji's genius lay in **blending ancient Indian governance structures** with contemporary administration to create a system suited to his time. Shivaji's administration was characterized by open opportunities for talent, regardless of caste, and his Ashtapradhan played key roles in various government functions.
- His revenue system prioritized the welfare of cultivators, eliminating middlemen, and introduced reforms to stabilize the economy.
- The kingdom's **judicial system was based on ancient Hindu laws and was decentralised, giving local communities a significant role** in legal matters.
- Shivaji also created a unified economic system, using innovations like **Malik Ambar's revenue model**, and established new taxes like Chauth (protection money) and Sardeshmukhi (a land-based tax). His judicial system gave a great deal of autonomy to local panchayats, ensuring fair trials and promoting justice at the grassroots level.

14. (a)

In News: Recently, the **Standing Stones of Mudumal**, located in Telangana's Narayanpet district, have been added to the **tentative list** of UNESCO World Heritage Sites.

Pair 1 is not correctly matched:

- **Mudumal Megalithic Menhirs** (Standing Stones), **located in Telangana**, are large **standing stones** (aka menhirs), some reaching heights of 10 to 14 feet, that were likely erected by prehistoric communities, arranged in a pattern.

Pair 2 is correctly matched:

- **Hire Benekallu in Karnataka** is notable for its extensive collection of menhirs, dolmens, and cave paintings, earning a place on the **UNESCO Tentative List in 2021**.

Pair 3 is not correctly matched:

- **Vibhutihalli in Karnataka:** It showcases a large rectangular field of boulders arranged in avenues, demonstrating solar alignments.

15. (c)

Puppetry is an ancient performing art, used for storytelling, entertainment, and social commentary.

- **Major Types:**
 - **String Puppets (Kathputli):** Popular in Rajasthan and Gujarat, controlled by strings.

- **Shadow Puppetry:** Leather puppets used to cast shadows, popular in **Andhra Pradesh, Tamil Nadu, and Kerala.**
- **Rod Puppetry:** Puppets controlled with rods, found in **West Bengal and Assam.**
- **Glove Puppets:** Worn on the puppeteer's hand, notably in Kerala (Pavakathakali).

16. (b)

Context: Aurangzeb's tomb has sparked a massive storm in Maharashtra, with growing demands for its demolition.

About

- Born in 1618 to Shah Jahan and Mumtaz Mahal, Aurangzeb was a military strategist who ruled for nearly 50 years—longer than any other Mughal Emperor—but was also infamous for his religious intolerance.
 - He reinstated the jizya tax on non-Muslims.
 - Ordered the destruction of temples, including the Kashi Vishwanath Temple in 1669.
 - He executed Guru Tegh Bahadur, the ninth Sikh Guru, in 1675.
- Aurangzeb's tomb is safeguarded as a **Monument of National Importance** by the Archaeological Survey of India under a 1958 law, which protects it from unauthorised alterations or demolition.

17. (d)

Context

- The Kaliyattam festival takes place in the Malayalam month of Kumbham, which falls in February-March.

About

- Also known as Theyyam, this festival features ritual dance performances and is recognized as an integral part of Kerala's intangible heritage.
- Kavus (sacred groves) and tharavadus (ancestral households) of the region are the venues of Kaliyattam (Theyyam).
- Belief and Significance: Kaliyattam is based on the belief that immortal spirits enter mortal bodies to perform a divine dance of revelation. During the performance, the artists become living embodiments of deities, blessing devotees with prosperity, protection, and spiritual energy.

18. (c)

The Muzharas were tenant farmers in pre-Partition Punjab, particularly in the princely state of Patiala, who cultivated land under the **Biswedars (landlords)**. They were subject to dual exploitation—paying dues to both landlords and the British authorities. The Muzhara Movement was initiated to demand land ownership rights and to challenge the oppressive biswedari system.

19. (c)

March 23 marked the execution of Bhagat Singh, Rajguru, and Sukhdev in **1931**.

- **Simon Commission:** An all-British panel arrived in India in 1928, to decide on governance, sparking protests.
 - **Lala Lajpat Rai** led a protest in Lahore against the Simon Commission.
 - Police Superintendent **James A. Scott** ordered a baton charge, severely injuring Lajpat Rai, who died on November 17, 1928.
 - **Revenge by Bhagat Singh, Rajguru, and Sukhdev:** They sought to avenge Lajpat Rai's death and **targeted James Scott**, but mistakenly killed **British officer John Saunders instead**.

- **Trial and Execution: The three were arrested, tried, and sentenced to death for Saunders' murder.** Hence, Statement c is not correct.
- Their martyrdom became a symbol of resistance and inspired countless others to continue the struggle for freedom.

20. (b)

About Vikramshila University

- It was founded by **King Dharmapala of the Pala Dynasty** in late 8th to early 9th century AD.
- It is present at **Bhagalpur district, Bihar, India.**
- Vikramshila was one of the most important **Buddhist learning centres of medieval India**, second only to Nalanda University.
- It was especially **renowned for Tantric studies**, which were popular during the Pala period in both Buddhist and Hindu traditions.
- **Atisa Dipankara**, a Buddhist master who played a significant role in the revival of Buddhism in Tibet, was associated with **Vikramashila University.**
- Destroyed in the late 12th century by Bakhtiyar Khalji, a military commander under **Qutb-ud-din Aibak.**

21. (a)

In News

- Maharashtra Chief Minister Devendra Fadnavis defended the Marathas' bravery in the Third Battle of Panipat (1761), calling it a testament to their courage rather than a reminder of defeat.

The Third Battle of Panipat

- It is one of the largest and deadliest battles of the 18th century.
- It was fought on January 14, 1761, between the Maratha Empire and a coalition led by **Ahmad Shah Durrani of Afghanistan.**
- The Marathas, under Sadashivrao Bhau, faced off against Afghan and Rohilla forces.
- Despite initial successes, the Marathas were besieged, suffering severe food shortages.
 - The battle resulted in a decisive Afghan victory, with massive casualties, including around 60,000-70,000 Marathas killed.
 - The Marathas' defeat halted their northern expansion for nearly a decade.
- However, under Peshwa Madhavrao, they later regained control of northern India by 1771.

22. (b)

Context

- Rajya Sabha member Ramji Lal Suman has sparked controversy with his statement on Rana Sanga, calling him a "traitor" for allegedly bringing Babur, to defeat Ibrahim Lodi.

About

- The **First Battle of Panipat** was fought on 21 April 1526 between Ibrahim Lodhi, Sultan of Delhi, and the Timurid warlord Zaheeruddin Babur.
- **Babur's force defeated Ibrahim's** much larger force of over one lakh (one hundred thousand) soldiers.
- This First battle of Panipat thus ended the 'Lodi Rule' established by Bahlul Lodhi in India.



ECONOMY

1. Consider the following statements:
 1. Chile is the largest producer of copper in the world.
 2. Rajasthan is the leading producer of copper in India.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. Which of the following statements correctly differentiate between Navratna and Maharatna CPSEs?
 - (a) Navratna CPSEs have a higher investment limit than Maharatna CPSEs.
 - (b) Maharatna CPSEs are allowed to make larger investments without government approval compared to Navratna CPSEs.
 - (c) Navratna CPSEs can be granted Maharatna status directly without meeting additional financial criteria.
 - (d) Both Navratna and Maharatna CPSEs must be listed on stock exchanges with a prescribed public shareholding under SEBI rules.
3. With reference to Capital Account Convertibility, which of the following statements is/are correct?
 1. India follows a fully convertible capital account convertibility regime.
 2. India follows a partially convertible current account convertibility regime.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
4. The Tendulkar Committee and Rangarajan Committee are primarily associated with which of the following issues in India?
 - (a) Tax reforms
 - (b) Poverty estimation
 - (c) Inflation control
 - (d) Banking sector reforms
5. With reference to the Thorium Reserves in India, consider the following statements:
 1. India has one of the largest reserves of thorium in the world.
 2. Together, Kerala and Tamil Nadu account for over 70% of India's thorium.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
6. Which of the following statements about the Line of Credit (LoC) is correct?
 - (a) It is a form of financial assistance provided by one country to another, usually in the form of grants.

- (b) It is a financial arrangement where a borrower can access funds up to a pre-approved limit and repay it flexibly.
- (c) LoCs are exclusively given by international financial institutions such as the World Bank and IMF.
- (d) LoCs do not require any repayment by the borrower.

7. Consider the following statements regarding RBI's liquidity measures:

1. The Liquidity Adjustment Facility (LAF) consists of Repo and Reverse Repo to regulate short-term liquidity.
2. The Bank Rate is primarily used to influence short-term liquidity in the market.

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. Which of the following crops is known as "White Gold"?

- (a) Rice
- (b) Jute
- (c) Sugarcane
- (d) Cotton

9. Which of the following statements about India's spice sector is correct?

- (a) India is the largest producer, consumer, and exporter of spices.
- (b) India produces all 109 varieties of spices listed by ISO.
- (c) Indonesia is the largest producer of spices, while India is the second largest.
- (d) None of the above.

10. With reference to Wheat Production in India, which of the following statements is/are correct?

1. Bihar is the top wheat-producing state in the country.
2. Wheat is the largest crop in India in terms of area coverage.

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. "Short-selling," recently in the news, is related to which of the following?

- (a) Selling stocks or assets without owning them, aiming to repurchase at a lower price
- (b) Selling goods at a price lower than the cost of production
- (c) Technique used by central banks to control inflation
- (d) A method of reducing fiscal deficit by cutting government spending

12. With reference to the Flexible Deficit Targeting, consider the following statements?

1. It allows adjusting fiscal deficit goals based on economic cycles and investment priorities.
2. It has built-in mechanisms to deviate from deficit targets during crises.

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 Intellectual Property, which of the following statements is/are correct?

1. Patent is an exclusive right granted for an invention, which is a product or a process.
2. Copyright is a legal term used to describe the rights that creators have over their literary and artistic works.

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. Which of the following micronutrients are commonly added to rice fortification?

1. Iron
2. Folic Acid
3. Vitamin B12
4. Zinc

Select the correct answer using the code given below:

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

15. Which of the following statements are correct regarding the trade war?

- (a) A situation where countries impose tariffs or trade barriers on each other in retaliation.
- (b) A competition between two countries to export more goods than the other.
- (c) A policy where a country bans all imports to protect its domestic industry.
- (d) A coordinated global effort to reduce trade deficits.

16. Consider the following statements regarding saffron cultivation in India:

1. The scientific name of saffron is *Crocus sativus*.
2. The usable part of the saffron plant is the petal of the flower.
3. Kashmir saffron holds a Geographical Indication (GI) tag.
4. Saffron cultivation requires a warm and humid climate.

Which of the statements given above is/are correct?

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

17. Consider the following statements:

1. The Tendulkar Committee defined poverty based on expenditure on food and essential items.
2. Rangarajan Committee suggested a higher poverty line, increasing the estimated number of poor people.

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. Consider the following statements

1. Eri Silk is a pure form of silk produced by the *Samia Cynthia Ricini* worm.
2. Eri Silk is mainly found in Meghalaya and Arunachal Pradesh.

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. Consider the following characteristics of a crop:

1. It is highly remunerative and labour-intensive.
2. It is drought-resistant and grows on marginal soils.
3. India is one of the largest producers and exporters of this crop.

Which crop best fits the above description?

- (a) Rubber
- (b) Sugarcane
- (c) Tobacco
- (d) Jute

20. The Byadgi chilli, recently seen in the news, is a well-known variety from which Indian state?

- (a) Andhra Pradesh
- (b) Telangana
- (c) Tamil Nadu
- (d) Karnataka

21. Which of the following statements are correct about Anti-Dumping Measures ?

- (a) It causes harm to domestic industries by enabling foreign goods to be sold at low prices.
- (b) It is intended to prevent unfair trade practices and restore fair competition.
- (c) It aims at creating a monopoly for domestic producers in the market.
- (d) It is not permitted under the World Trade Organisation framework.

22. Which of the following best describes the concept of "Inclusive Development"?

- (a) Economic growth that focuses on increasing wealth for the rich and improving conditions for the poor.
- (b) A process where growth is broad-based and benefits are equitably distributed among all sections of society, with a focus on marginalized and vulnerable groups.
- (c) Development that prioritizes industrialization and urbanization while ignoring rural areas and small-scale enterprises.
- (d) A strategy that seeks to maximize the gross domestic product (GDP) of a country, regardless of income inequality.

23. Dalle Chilly has received a Geographical Indication (GI) tag in which of the following Indian States?

- (a) Karnataka
- (b) Nagaland
- (c) Andhra Pradesh
- (d) Sikkim

24. With reference to the Geographical Indication (GI) tag in India, consider the following statements:

1. It is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
2. The registration of a geographical indication is valid for a period of 10 years, it can be renewed from time to time.

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

25. The Equalisation Levy, recently seen in the news, was introduced to tax:

- (a) Cross-border financial transactions
- (b) Online advertisement services
- (c) Agricultural exports
- (d) Tourism services

26. Consider the following statements regarding Regional Rural Banks (RRBs):

1. Regional Rural Banks were established on the recommendation of the Narasimham Working Group.
2. RRBs operate under a tripartite ownership structure involving the Centre, State Government, and Sponsor Bank.
3. The Reserve Bank of India (RBI) regulates RRBs, while NABARD supervises them.

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

27. With reference to Infrastructure Investment Trusts (InvITs) in India, consider the following statements:

1. InvITs are required by SEBI to distribute at least 90% of their net distributable income to unitholders.
2. The income earned by InvITs in the form of interest, dividend, or rent is fully exempt from taxation in the hands of unitholders.

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

28. Consider the following statements:

1. India is the second largest tea exporter in the world trailing behind Kenya.
2. Black tea makes approximately 96% of the total tea exports of India.

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)

Statement 1 is correct: Chile, Peru, China, the Democratic Republic of the Congo (DRC), and the United States lead in global copper production.

Statement 2 is not correct: Madhya Pradesh is the leading producer of copper in India followed by Rajasthan.

• **Copper Mines in India:**

- Malanjkhand Mine- Madhya Pradesh
- Kolihan Mine- Rajasthan
- Khetri Mine- Rajasthan
- Banwas Mine- Rajasthan
- Surda Mine- Jharkhand

2. (b)

Maharatna CPSEs have a higher financial autonomy threshold than Navratna CPSEs, allowing them to invest up to ₹5,000 crore or 15% of their net worth in a single project without government approval.

Maharatna vs. Navratna

- Maharatna status is a higher level of autonomy than Navratna status.
- This higher status grants greater financial and operational freedom.
- Specifically, Maharatna companies have a significantly higher investment ceiling without needing government approval.
- Maharatna CPSEs must be listed on stock exchanges, adhering to SEBI's public shareholding norms in contrast to Navratna CPSEs that are not required to be listed, giving them flexibility in terms of market participation.

3. (d)

Context

- The Chairman of the 16th Finance Commission, Arvind Panagariya, said that India should not rush into full capital account convertibility at its current per capita income level.

Capital Account Convertibility (CAC)

- Capital account convertibility refers to **converting local financial assets into foreign ones** freely and vice versa without restrictions.
- It allows unrestricted capital movement for foreign investments, asset purchases, and remittances.

Current Status of Capital Account Convertibility

- Statement 1 is incorrect:** India **does not** follow a fully convertible capital account regime. It follows **partial capital account convertibility**, meaning capital transactions (such as foreign investments and loans) are regulated by the RBI.
- Statement 2 is incorrect:** India follows **full convertibility** on the **current account** (trade in goods, services, remittances, etc.), not partial convertibility.

4. (b)

Context: According to a study by economists Surjit S Bhalla and Karan Bhasin, India has witnessed a sharp reduction in poverty and inequality over the past decade.

Poverty Line Estimation in India

- Tendulkar committee (2009):** Poverty line in the Suresh Tendulkar methodology was expenditure of ₹33 a day in urban areas and ₹27 a day in rural areas.
 - The national poverty line for 2011-12 was estimated at Rs. 816 per capita per month for rural areas and Rs. 1,000 per capita per month for urban areas.
- Rangarajan committee (2014):** In the Rangarajan methodology, it was ₹47 a day in urban areas and ₹30 a day in rural areas.
 - The government did not take a call on the report of the Rangarajan Committee, therefore, poverty is measured using the Tendulkar poverty line.
- International Poverty Line:** The World Bank defines a person as extremely poor if a person is living on less than \$2.15 per day, which is adjusted for inflation as well as price differences between countries.

5. (a)

Statement 1 is correct: India has one of the largest reserves of thorium in the world.

Statement 2 is not correct: Major thorium deposits are found with large reserves in **Kerala, Odisha, Tamil Nadu, and Andhra Pradesh.**

- Together, **Kerala and Odisha account for over 70%** of India's thorium.

6. (b)

A Line of Credit (LoC) is a flexible financial arrangement in which a lender provides a borrower with access to a specified amount of funds that can be drawn upon as needed. The borrower can withdraw funds up to the approved limit and is required to repay them, often with interest, based on the agreed terms. LoCs can be provided by governments, financial institutions, and multilateral organizations to individuals, businesses, or countries for various purposes, including trade, infrastructure, and development projects.

7. (a)

Context: In response to **tight liquidity conditions** in the banking system, the **Reserve Bank of India (RBI)** has announced a **liquidity infusion initiative** using **two Open Market Operations (OMOs)** and a **USD/INR Buy/Sell Swap auction.**

Other Liquidity Measures Used by RBI

- **Quantitative Tools** (directly impacting money supply):
 - **Liquidity Adjustment Facility (LAF)**: Repo & Reverse Repo to regulate short-term liquidity.
 - **Cash Reserve Ratio (CRR)**: Minimum cash reserves banks must hold.
 - **Statutory Liquidity Ratio (SLR)**: Percentage of net demand and time liabilities (NDTL) to be maintained in G-Secs.
 - **Bank Rate**: Long-term borrowing rate influencing credit expansion.
- **Qualitative Tools** (indirect regulation of credit flow):
 - **Credit Rationing**: Restricting lending to certain sectors.
 - **Moral Suasion**: Persuading banks to follow RBI guidelines.
 - **Selective Credit Control (SCC)**: Controlling credit for speculative activities.
 - **Margin Requirement**: Adjusting the collateral needed for loans.

8. (d)

In News: India's cotton imports have significantly increased in recent months, with imports reaching \$104 million in August 2024 and rising to \$184.64 million in January 2025, compared to \$19.62 million in January 2024.

About Cotton:

- Known as **"White-Gold"** due to its economic importance.
- One of India's most important commercial crops, contributing 25% of global cotton production.
- **India's Cotton Scenario:**
 - India is the **only country in the world that grows all four species of cotton**. These species are:
 - ♦ *Gossypium arboreum* (Asian Cotton),
 - ♦ *Gossypium herbaceum* (Asian Cotton),
 - ♦ *Gossypium barbadense* (Egyptian cotton), and
 - ♦ *Gossypium hirsutum* (American Upland cotton).
 - It is a **crucial fiber and cash crop in India**, significantly contributing to both the industrial and agricultural economy.
 - It provides the primary raw material for the cotton textile industry.
 - **Gujarat, Maharashtra and Telangana** are the major cotton producing states which produce about 65% of cotton production in the country.

9. (a)

Spices Market In India

- India is known as the **'Spice Bowl' of the world**. It produces a number of quality, rare and medicinal spices.
- India is the **world's largest spice producer**. It is also the **largest consumer and exporter of spices**.
- India holds only **0.7% of the \$14 billion global seasoning market in 2024**, compared to China's 12% and the USA's 11%.
- India **exports 1.5 million tonnes of spices** worth \$4.5 billion, capturing a quarter of the \$20 billion global spice market.
- **Only 48% of India's spice exports** are value-added products and to meet the Spices Board of India's \$10 billion export target by 2030, the share of value-added spices should rise to 70%.

- The largest spice-producing states in India are Madhya Pradesh, Rajasthan, Gujarat, Andhra Pradesh, Telangana, Karnataka, Maharashtra, Assam, Orissa, Uttar Pradesh, West Bengal, Tamil Nadu and Kerala.

10. (d)

Context

- According to the Second Advance Estimates of Agriculture production, India's wheat production is estimated to reach a record level of **115.3 million metric tonnes** during **2024-25**.

Wheat Production in India

- **Area:** In 2023-24, the area under wheat stood at **318.33 lakh hectares**, while the production is estimated at 113.92 million tonnes.
 - In India **wheat is the second largest crop** after paddy in terms of area coverage.
- **Uttar Pradesh** is the top wheat-producing state in the country, followed by **Madhya Pradesh**, Punjab, Haryana, Rajasthan, Bihar, Gujarat and Maharashtra.
- **Major Export Destinations (2023-24):** Nepal, Iraq, Korea Rep., UAE and Mongolia.

11. (a)

Short-selling is a trading strategy where an investor borrows a stock or asset, sells it at the current market price, and later repurchases it at a lower price to make a profit. It is commonly used in stock markets and financial markets to speculate on price declines or hedge against market risks.

Key Features of Short-Selling:

- Investors borrow shares from a broker and sell them at the current price.
- They hope to buy back the shares later at a lower price, return them to the lender, and pocket the difference as profit.
- If the stock price rises instead of falling, short-sellers face unlimited losses.
- Short-selling is often associated with market volatility and regulatory scrutiny, as seen in cases like the Hindenburg report on Adani Group.

12. (c)

In News: As India aims to become a developed nation by 2047, it is crucial to **adopt a more flexible approach to fiscal deficit targets** to ensure **long-term investments** without compromising fiscal prudence.

Statement 1 is correct:

- **Flexible Deficit Target** allows for adjusting fiscal deficit goals **based on economic cycles, external shocks, and investment priorities**.
- It allows deviation based on economic conditions, and balances fiscal prudence with growth needs.

Statement 2 is correct

- **Key Components of Flexibility:**

- **Escape Clauses:** Built-in mechanisms to deviate from deficit targets during crises (e.g., pandemic, global shocks).
- **Counter-Cyclicality:** Allowing higher deficits during economic downturns and consolidation during high-growth periods.
- **Expenditure Prioritization:** Focusing on essential spending such as infrastructure and welfare while cutting non-urgent outlays.
- **Revenue Considerations:** Adapting targets based on tax collection efficiency, disinvestment proceeds, and other fiscal inflows.

13. (c)

Context

- India has witnessed a significant rise in intellectual property (IP) filings over the past decade, marking its progress as an innovation-driven economy.

What is Intellectual Property?

- Intellectual property (IP) refers to **creations of the mind**, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.
- IP is protected in law by patents, copyright and trademarks**, which enable people to earn recognition or financial benefit from what they invent or create.

Types of intellectual property

- Patent:** A patent is an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem.
- Copyright:** It is a legal term used to describe the rights that creators have over their literary and artistic works.
- Trademark:** It is a sign capable of distinguishing the goods or services of one enterprise from those of other enterprises.
- Industrial design:** It constitutes the ornamental or aesthetic aspect of an article.

14. (a)

Context

- The Standing committee on Consumer Affairs, Food, and Public Distribution has recommended the meticulous implementation of the **scheme** of distribution of fortified rice across the country.

What is food fortification?

- According to WHO**, fortification is the practice of deliberately increasing the content of one or more micronutrients (i.e., vitamins and minerals) in a food or condiment.
- Rice kernels can be fortified with several micronutrients, such as **iron, folic acid and other B-complex vitamins, vitamin A and zinc**.

15. (a)

Context

- The ongoing trade war between the United States and China has caused significant global economic turbulence, influencing everything from tariffs on goods to the financial markets and international relations.

What is a Trade War?

- A trade war occurs when nations impose tariffs or trade barriers against each other in retaliation for perceived economic harm or unfair trade practices.
- It disrupts global supply chains, increases production costs, and impacts economic growth worldwide.

16. (a)

About Saffron Cultivation

- Scientific Name:** *Crocus sativus* (Saffron Crocus).
- Part Used:** The **stigma** of the flower, which is dried to produce saffron.
- Ideal Growing Conditions:**
 - Altitude:** 2,000 meters above sea level.

- **Soil Type:** Loamy, sandy, or calcareous soils with a **pH range of 6-8**.
- **Climate:**
 - ♦ **Summer temperature:** Below **40°C**.
 - ♦ **Winter temperature:** As low as **-20°C**.
- Requires a **dry to moderate climate** with well-drained soil.
- **Current Production:**
 - **Kashmir saffron** (grown in **Pampore, Pulwama, and Budgam**) holds a **Geographical Indication (GI)** tag.
 - India's saffron production is currently limited, making imports necessary to meet demand.

17. (c)

In News: Recently, the Supreme Court of India Bench, led by Justice Surya Kant, raised concerns over contradiction in some **states' claims of high per capita income** while a significant portion of their population continues to live **below the poverty line (BPL)**.

- Poverty is commonly defined as the lack of access to basic human needs such as food, shelter, healthcare, and education.

Statement 1 is correct:

- **Tendulkar Committee (2009):** It defined poverty based on expenditure on food and essential items.

Statement 2 is correct:

- **Rangarajan Committee (2014):** It suggested a higher poverty line, increasing the estimated number of poor people.
 - It recommended a new poverty line of ₹972 per capita per month in rural areas and ₹1407 in urban areas for the year 2011-12.

18. (c)

The North Eastern Handicrafts and Handlooms Development Corporation Ltd. (NEHHDC) under the Ministry of Development of North Eastern Region, has obtained Oeko-Tex certification for eri silk from Germany.

Statements 1 and 2 are correct : Eri Silk is a pure and genuine form of silk produced by the **Samia cynthia ricini** worm.

- The word "Eri" comes from "erranda," the Assamese word for castor, as the worms feed on castor oil plant leaves.
- It is known as the **"father of all cultured and textured silks."**
- It is found mainly in Northeast India (Meghalaya, Assam, Arunachal Pradesh) and some parts of China, Japan, and Thailand.

19. (c)

About the Tobacco Cultivation in India

- Tobacco is one of the important **commercial crops** growing under **diverse agro-ecological conditions**.
- It is a **drought tolerant, hardy and short duration crop** which can be grown on soils where other crops cannot be cultivated profitably.
- It occupies a meagre 0.24% to 0.3% of India's total arable land.
 - Despite this small percentage, tobacco farming is **highly labour-intensive** and remunerative compared to food crops.

- The major tobacco-growing states in India are Andhra Pradesh, Karnataka, Gujarat, Uttar Pradesh, Tamil Nadu, Bihar, and West Bengal.
- **Types of Tobacco:** Flue-cured Virginia (FCV), Bidi, Cigar Filler, and Hookah and Chewing.
- **Production and Distribution:** India is the **2nd largest producer and exporter** after China and Brazil respectively.

Let's analyse other options:

- Rubber is labour-intensive, but it requires specific climatic conditions (high rainfall) and doesn't fit the drought-resistant criterion.
- Sugarcane is labour-intensive, and India is a major producer. However, it requires a lot of water and fertile soils, contradicting the drought-resistant and marginal soil requirement.
- Jute requires significant water and is not drought-resistant.

20. (d)

In News

- Byadgi chilli prices have dropped significantly, causing distress among farmers due to excess stock, stringent export tests, and high production costs.

The Byadgi chilli

- It is a well-known variety from Karnataka, named after Byadgi in the Haveri district.
- It is a bright red, 12-15 cm long chilli with wrinkled pods.
- The fragrance and deep red colour of Byadgi chillies are well-known.
- It is used in pickles, masalas, and chilli powder.
- It is also used in oleoresin extraction.
- Byadgi chillies have been designated as a Karnataka Geographical Indication.

21. (b)

In News: India has imposed anti-dumping duties on five Chinese goods, including aluminium foil, to protect domestic industries from the impact of cheaper imports from the neighbouring country.

- Dumping occurs when goods are sold at unfairly low prices in foreign markets, distorting trade.
- **Anti-dumping duties are imposed to correct this and restore fair competition.** While not a protectionist measure, they aim to protect domestic industries from injury caused by dumping, and their use is allowed by the WTO.
- They are imposed as per the multilateral regime of Geneva-based **World Trade Organization (WTO)**, which aims to ensure fair trading practices and a level-playing field for domestic producers vis-a-vis foreign producers and exporters.
- Article 6 in the **General Agreement on Tariffs and Trade (GATT)** allows countries to take action against dumping.

22. (b)

Inclusive Development refers to a development approach that ensures **all segments of society** have **equal access** to opportunities, resources, and benefits of economic, social, and political progress.

- It focuses on **reducing inequality** and addressing the needs of diverse populations, ensuring that **no one is left behind in the development process**.
- The Indian model of inclusive growth, viewed from a development economics perspective, has three pillars: **Market economics, Empowerment, and Pragmatism**.

23. (d)

The Agricultural and Processed Food Products Export Development Authority (APEDA) has successfully exported the first consignment of Dalle Chilly from Sikkim to the Solomon Islands.

- **Dalle Chilly** is known for its **pungency, bright red color, and high nutritional value**, with **Scoville Heat Units (SHU)** ranging from 100,000 to 350,000.
 - **The Scoville scale** is a **measurement of the pungency** (spiciness) of peppers and other hot foods.
 - The scale is based on the **concentration of capsaicin**, an active component of chili peppers that produces a burning sensation when it touches the tongue or skin.
- Dalle Chilly received the **Geographical Indication (GI) tag in 2020**, enhancing its marketability and identity.
- **Government Support:** The Indian government promotes organic farming in North East India through the **Mission Organic Value Chain Development for North Eastern Region (MOVCD-NER) scheme**, boosting organic Dalle Chilly production.
- **Significance:** This export boosts Sikkim's global spice profile and highlights India's growing prominence in the organic agricultural market.

24. (c)

Both the statements are correct: **Geographical Indication (GI)** is a **sign used on products** that have a **specific geographical origin** and possess qualities or a reputation that are due to that origin.

- Geographical Indications are part of the **intellectual property rights** that come under the **Paris Convention for the Protection of Industrial Property**.
- In India, Geographical Indications registration is administered by the **Geographical Indications of Goods (Registration and Protection) Act of 1999**.
 - They are typically used for **agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products**.
- The registration of a geographical indication is **valid for a period of 10 years**, it can be renewed from time to time for a further period of 10 years each.

25. (b)

Context: The government proposed to **abolish** the **6% Equalisation Levy (digital tax)** on online advertisements, effective **April 1, 2025**.

About

- **Platforms:** This move benefits **advertisers on digital platforms like Google, X, and Meta**.
- **Equalisation Levy:** The Equalisation Levy on online ads **was introduced in 2016**, and the **Finance Act 2020 extended it to e-commerce services**.
 - It was designed to **tax online advertising services, digital ad space, and related facilities**.
 - The levy is charged at 6% in respect of the **sum received or receivable by a non-resident for online advertisement services**.
 - In 2020, Equalisation Levy was **also imposed on non-resident e-commerce operators**. The rate was 2%, but **it was removed in 2024**.
- **Aim:** The proposal aims to show a **more accommodative stance toward the US**, which has threatened reciprocal tariffs starting April 2.

26. (d)

About Regional Rural Banks (RRBs)

- The genesis of RRBs can be traced back to 1975, following the recommendations of the **Narasimham Working Group**.

- Initially created through an ordinance, RRBs were later given a **statutory foundation through the Regional Rural Banks Act, 1976**.
- First **RRB established was Prathama Bank** (sponsored by Syndicate Bank) in Uttar Pradesh.
- The primary objective of RRBs is to **develop the rural economy by providing banking and financial services to**: small and marginal farmers, agricultural labourers, artisans and small entrepreneurs.
- RRBs follow a tripartite ownership model, ensuring coordinated **support from the Centre, State, and sponsoring banks**:
 - Government of India – 50%
 - State Government – 15%
 - Sponsor Bank (usually a Public Sector Bank) – 35%
- They are regulated by the **Reserve Bank of India (RBI) and supervised by NABARD**.

27. (a)

Statement 1 is correct: InvITs are required by SEBI to distribute at least 90% of their net distributable income to unitholders.

Statement 2 is not correct: While there are certain tax benefits associated with investing in InvITs, the income earned is not fully exempt from taxation in the hands of the unitholders. The taxation depends on the nature of the income and the tax status of the unitholder. For instance, interest income is generally taxable.

28. (c)

Both the statements are correct: As per the Indian Tea Board, India has become the **second largest tea exporter in the world**.

- India's tea exports in 2024:** 255 million kg, **surpassing Sri Lanka and ranking second after Kenya**.
- Types of tea exported:** Primarily black tea (96%), with small quantities of regular, green, herbal, masala, and lemon tea.
- Key driver:** Significant rise in shipments to West Asia, especially Iraq, now accounting for 20% of India's tea exports.
- India's Export destinations:** Over 25 countries, including UAE, Iraq, Iran, Russia, US, and UK.

■■■■

INDIAN POLITY & CONSTITUTION

1. With reference to the Central Waqf Council, consider the following statements:
 1. It is a statutory body under the administrative control of the Union Ministry of Minority Affairs.
 2. It acts as a National Level Apex Advisory Body to the Central Government.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. Article 136 of the Indian Constitution is related to:
 - (a) Supreme Court's powers to grant special leave to appeal
 - (b) The power of the Supreme Court to review its own judgments
 - (c) The procedure for impeachment of judges
 - (d) The jurisdiction of High Courts in India
3. Which of the following statements regarding tribunals in India is correct?
 - (a) Tribunals are purely judicial bodies established to handle all types of legal disputes.
 - (b) The 44th Amendment Act (1978) introduced tribunals into the Constitution under Part XIV-A.
 - (c) Article 323A allows Parliament to set up Administrative Tribunals for public service matters.
 - (d) Tribunals do not have any role in taxation or land reforms.
4. The case of the State of West Bengal v. Anwar Ali Sarkar (1952) is related to which of the following aspects of the Indian Constitution?
 - (a) Separation of powers
 - (b) Parliamentary privileges
 - (c) Right to Equality under Fundamental Rights
 - (d) President's Rule under Article 356
5. Consider the following statements regarding the National Commission for Women (NCW):
 1. It was established under the National Commission for Women Act, 1990.
 2. It functions under the Ministry of Social Justice and Empowerment.
 3. The NCW has the power to enforce legal action and directly penalize violators of women's rights.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 1 and 2 only
 - (c) 1 and 3 only
 - (d) 2 and 3 only
6. Consider the following pairs:

Amendments	Key Provisions
1. 52nd	Anti-Defection Law
2. 61st	Delimitation
3. 73rd	Institutionalizing Panchayats
4. 91st	Lowering of Voting Age

How many of the above pair(s) is / are correctly matched?

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

7. With reference to the Comptroller and Auditor General (CAG) of India, consider the following statements:

1. The CAG is appointed by the President of India and holds office for a term of six years or until the age of 65 years, whichever is earlier.
2. The CAG can be removed from office in the same manner as a Supreme Court judge, through a resolution passed by both Houses of Parliament with a simple majority.
3. The CAG submits three audit reports to the Prime Minister

Which of the statements given above is/are correct?

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

8. Consider the following statements regarding the Competition Commission of India (CCI):

1. It is a statutory body established under the Competition Act, 2002.
2. It is responsible for preventing anti-competitive practices, including cartelization and abuse of dominance.
3. Its decisions can be directly challenged in the Supreme Court of India.

Which of the above statements is/are correct?

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

9. In which of the following judgements, the Supreme Court of India affirmed that freedom of the press is part of fundamental rights?

- (a) Romesh Thappar vs State of Madras
- (b) Sahara India Real Estate Corp vs SEBI
- (c) Arnab Ranjan Goswami vs Union of India
- (d) Anuradha Bhasin vs Union of India

10. With reference to the Public Accounts Committee (PAC) of the Indian Parliament, consider the following statements:

1. It is a constitutional body.
2. The Chairperson of the Committee is always from the ruling party.
3. It examines the audit reports of the Comptroller and Auditor General of India (CAG).

Which of the statements given above is/are correct?

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

11. With reference to the Right to Information Act (RTI), 2005, consider the following statements:

1. The Act applies to public authorities, which include government departments, ministries, and organizations that are substantially funded by the government.
2. Citizens have the right to request any information from public authorities without any exception.

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.** Consider the following statements:
1. In-house inquiry into the conduct of judges is limited to financial arbitrariness.
 2. It requires Parliamentary approval under Article 124(4) of the Constitution of India.
- 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.** Which of the following is not a characteristic of a Money Bill under Article 110 of the Indian Constitution?
- (a) It can only be introduced in the Lok Sabha.
(b) It requires the President's recommendation for introduction.
(c) Rajya Sabha can amend it.
(d) It deals exclusively with matters like imposition of taxes and withdrawal from the Consolidated Fund of India.
- 14.** With reference to the Collegium System in India, consider the following statements:
1. The Supreme Court of India established the Collegium System in Second Judges Case, 1993.
 2. The composition of the Collegium was clarified in the Third Judges Case, 1998.
- 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
- 15.** Consider the following statements:
1. Under the Finance Act 2023, 30% Tax Deducted at Source (TDS) on net winnings from online gaming are applicable.
 2. Betting and gambling are the Union subjects under the seventh schedule of the constitution.
- 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 statement regarding National Human Rights Commission (NHRC):
1. It is a statutory body.
 2. It has powers of a civil court.
- Which of the following statements is/are not correct ?
- (a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2
- 17.** Consider the following statements:
1. Prisons are a State Subject under the 7th Schedule of the Indian Constitution.
 2. The Delhi government has legislative and executive powers over administration of services except for public order, police and land.
- Which of the statements given above is/are correct?
- (a) Only 1 (b) Only 2
(c) Both 1 and 2 (d) Neither 1 nor 2

18. Which of the following statements about the Medical Termination of Pregnancy (MTP) Act, 1971, in India is/are correct?
1. The MTP Act allows the termination of pregnancy up to 12 weeks of gestation with the approval of one registered medical practitioner.
 2. The MTP Act applies to both private and public healthcare settings.
- 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
19. With reference to the Central Bureau of Investigation (CBI), consider the following statements:
1. It was established in 1963 on the recommendation of the Santhanam Committee.
 2. The CBI is headed by a Director for a tenure of 5 years, appointed by the central government on recommendation by a three-member Appointment Committee.
- 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 Public Accounts Committee (PAC), consider the following statements:
1. It was first established in 1921 under the Montague Chelmsford Reforms.
 2. It has members from both the Lok Sabha and Rajya Sabha.
 3. Members are elected annually by proportional representation.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
21. With reference to the 2016 Amendment to Child Labour (Prohibition & Regulation) Act, consider the following statements:
1. It prohibited child employment below 12 years in all occupations.
 2. It also extended prohibition to adolescents (14-18 years) in hazardous jobs.
- 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. (c)

In News: Recently, the **Union Cabinet**, led by the Prime Minister of India, has approved the **revised Waqf Bill** with key changes recommended by the **Joint Parliamentary Committee (JPC)**.

Statement 1 is correct

- **Central Waqf Council** is a **statutory** set up in 1964 under the administrative control of the **Ministry of Minority Affairs** as per the provision given in the Waqf Act, 1954.
 - It has been empowered to advise the Central Government, State Governments and State Waqf Boards.
 - It consists of the **Chairperson, who is the Union Minister In charge of Waqf** and such other members, not exceeding 20 in number, as may be appointed by the Government of India.

Statement 2 is correct:

- It acts as a National Level Apex Advisory Body to the Central Government on matters concerning the working of the Waqf Boards and the due administration of Awqaf in the country.

2. (a)**In News**

- Vice President Jagdeep Dhankhar, speaking at a conference on arbitration, highlighted concerns regarding the misuse of **Article 136 of the Constitution**.

Article 136 of the Constitution

- Also called a special leave petition (SLP).
- Article 136 of the Constitution allows the Supreme Court to grant special leave to appeal from any judgment, decree, or order made by any court or tribunal in India.
- It allows the Supreme Court to entertain appeals even in cases where no other legal provision provides an automatic right of appeal.
- It can be filed in **both civil and criminal cases**.
- It is essentially a discretionary power of the Supreme Court, and the court is not bound to accept the appeal.

3. (c)

Context: The Supreme Court stressed the need to **strengthen tribunals** highlighting issues in staff appointments, service conditions, and judicial tenure while reviewing the **Tribunal Reforms Act, 2021**.

What are Tribunals?

- Tribunals are **quasi-judicial bodies** established to resolve disputes in specialized areas, ensuring faster and expert adjudication. The **42nd Amendment Act (1976) added Part XIV-A to the Constitution**, introducing:
 - **Article 323A:** Allows Parliament to set up Administrative Tribunals for public service matters.
 - **Article 323B:** Empowers Parliament and state legislatures to establish tribunals for taxation, land reforms, industry, and elections.

4. (c)**Context**

- The Supreme Court's ruling in **State of West Bengal v. Anwar Ali Sarkar (1952)** laid the foundation for the "**reasonable classification**" test under **Article 14 of the Indian Constitution**.

About

- The West Bengal state legislature passed the **West Bengal Special Courts Act 1950** to set up special courts for the speedy trial of certain offences particularly those related to communal violence and riots.
- The **Act was controversial** as it gave the government wide powers to establish and control the special courts.
- The Court held that the Act created an arbitrary classification between accused persons and thus offended the doctrine of equality before the law.

5. (a)

The National Commission for Women (NCW) is an autonomous statutory body established to protect and promote women's rights in India. It was formed under the **National Commission for Women Act, 1990**, and plays a pivotal role in policy advocacy, legal reforms, and women's

welfare initiatives. It functions **under the Ministry of Women and Child Development**. It **does not have direct penalizing powers** but can recommend actions to authorities.

Key Initiatives of NCW

SHE-BOX: Online portal for sexual harassment complaints at the workplace.

Legal Awareness Programs: To educate women on their rights and legal protections.

Mahila Jan Sunwai (Public Hearings): Addresses grievances and provides legal assistance.

Collaboration with NGOs & Stakeholders: To ensure grassroots implementation of women's welfare programs.

6.

Pair 1 is correctly matched, and Pair 4 is not correctly matched.

- **52nd Amendment Act (1985): Anti-Defection Law** & introduction of **Tenth Schedule to the Constitution**, aiming to curb political defections by disqualifying defectors from holding public office.
 - **91st Constitutional Amendment Act (2003):** Aimed to curb political defections by limiting the size of ministerial councils and enforcing anti-defection laws.

Pair 2 is not correctly matched.

- **61st Constitutional Amendment Act (1988): Lowering of Voting Age from 21 to 18**, expanding democratic participation.

Pair 3 is correctly matched.

- **73rd Constitutional Amendment Act (1992):** Strengthened local governance by institutionalizing Panchayats, ensuring direct elections and reserved seats for marginalized communities and women.

7. (b)

Statement 1 is correct: The Comptroller and Auditor General (CAG) of India is appointed by the President of India and holds office for six years or until the age of 65 years, whichever is earlier. This is in accordance with Article 148 of the Indian Constitution.

Statement 2 is not correct: The CAG can be removed from office in the same manner as a Supreme Court judge, but this requires a special majority (i.e., a majority of the total membership of each House and a majority of not less than two-thirds of the members present and voting), not a simple majority.

Statement 3 is not correct: The CAG submits audit reports to the President of India, not the Prime Minister. The reports include:

Audit report on Appropriation Accounts

Audit report on Finance Accounts

Audit report on Public Undertakings

These reports are then placed before Parliament through the Public Accounts Committee (PAC).

8. (a)

Statement 1 is correct: The Competition Commission of India (CCI) is a statutory body established under the Competition Act, 2002. It became fully operational in 2009.

Statement 2 is correct: CCI is responsible for promoting fair competition and preventing anti-competitive practices, including cartelization, abuse of dominance, and anti-competitive agreements.

Statement 3 is not correct: CCI's decisions cannot be directly challenged in the Supreme Court. Appeals against CCI orders must first be made to the National Company Law Appellate Tribunal (NCLAT). Only after the NCLAT's decision can the case be appealed to the Supreme Court of India.

9. (a)

In News: At the 19th edition of the Ramnath Goenka Awards for Excellence in Journalism awards ceremony, President Droupadi Murmu emphasized the critical role of journalism in sustaining democracy.

- **Romesh Thappar vs State of Madras (1950):** Affirmed that **freedom of the press is part of free speech** under **Article 19(1)(a)**.
 - However, this right is **subject to reasonable restrictions under Article 19(2)**, allowing the government to impose limitations in cases of national security, defamation, or public order concerns.
- **Sahara India Real Estate Corp vs SEBI (2012):** Allowed prior restraints on media reports only in cases of 'real and substantial' risk to justice.
- **Arnab Ranjan Goswami vs Union of India (2020):** Highlighted that press freedom cannot be curtailed arbitrarily, but media must act responsibly.
- **Anuradha Bhasin vs Union of India (2020):** Stressed that shutting down the internet curbs journalism and violates free speech.

10. (c)

Statement 1 is not correct: The Public Accounts Committee (PAC) is a parliamentary committee, not a constitutional body. It is constituted under the Rules of Procedure and Conduct of Business in Lok Sabha.

Statement 2 is not correct: The Chairperson of the PAC is appointed by the Speaker of the Lok Sabha and is usually from the opposition party, not the ruling party.

Statement 3 is correct: It examines the audit reports of the Comptroller and Auditor General of India (CAG).

11. (a)

Statement 1 is correct: **Right to Information Act (RTI), 2005** was designed to promote transparency in the functioning of the government by giving citizens the right to access information from public authorities.

- **Scope:** The Act applies to public authorities, which include government departments, ministries, and organizations that are substantially funded by the government.

Statement 2 is not correct: Information Accessible to the Public: Citizens have the right to request information from public authorities. This includes the right to access records, documents, and other information.

- **Exclusions:** Information that may compromise national security, breach confidentiality, or harm the integrity of ongoing investigations.

12. (d)

In News: Recently, the Chief Justice of India (CJI) initiated an unprecedented three-member in-house inquiry into the conduct of Delhi High Court judge Justice Yashwant Varma.

Statement 1 is not correct

- The need for an in-house inquiry mechanism arose in **1995** following **allegations of financial impropriety** against Bombay High Court Chief Justice A.M. Bhattacharjee.

- The process was **refined in 2014 after a sexual harassment complaint** led to the establishment of a seven-step inquiry framework.

Statement 2 is not correct

- In-house inquiry is an **internal mechanism** aimed at addressing conduct inconsistent with judicial values.
- It is not similar to the **impeachment, which requires Parliamentary approval under Article 124(4) of the Constitution.**

13. (c)

Money Bill can only be introduced in the **Lok Sabha**. Article 109(1) explicitly states that a Money Bill shall not be introduced in the Rajya Sabha.

Article 117(1) states that a Bill of the nature specified in clause (1) of Article 110 shall not be introduced in either House of Parliament except on the **recommendation of the President**.

The **Rajya Sabha cannot amend** a Money Bill. While the Rajya Sabha can suggest amendments, the Lok Sabha has the final say and can either accept or reject those suggestions. The Rajya Sabha cannot make changes to the bill on its own.

It deals exclusively with matters like **imposition of taxes and withdrawal from the Consolidated Fund of India**.

14. (c)

In News: The Justice Yashwant Varma controversy has reignited debates about judicial accountability, the process of appointing judges in India and brought the **National Judicial Appointments Commission (NJAC)** back into the spotlight.

- **First Judges Case (1981) – S.P. Gupta v. Union of India:** The Supreme Court ruled that ‘consultation’ with the CJI did not mean ‘concurrence’ meaning the **executive had more power** in judicial appointments.
 - It allowed greater government interference in appointments.

Statement 1 is correct

- **Second Judges Case (1993) – Supreme Court Advocates-on-Record Association v. Union of India:** It overturned the First Judges Case, and **established the Collegium System**, giving primacy to the judiciary in appointments.
 - The ruling held that **CJI’s recommendation**, in consultation with senior judges, would be **binding on the President**.

Statement 2 is correct

- **Third Judges Case (1998) – Presidential Reference:** The composition of the Collegium was clarified:
 - **SC Judges’ appointments:** The CJI and four senior-most judges.
 - **HC Judges’ appointments:** The CJI and two senior-most judges.

15. (a)

Statement 1 is correct: Finance Act 2023: 30% TDS on net winnings from online gaming, effective from assessment year 2024-25.

- GST at 28% on online gaming from 1st October 2023.
- **Online gaming suppliers must register** under the Simplified Registration Scheme of the IGST Act.
- **GST Intelligence Headquarters** can direct blocking of unregistered platforms violating the IGST Act.

Statement 2 is not correct: Betting and gambling are **state subjects** under the Constitution, with states responsible for prevention, investigation, and prosecution of related crimes.

- The Central Government supports states with advisories and financial assistance for capacity building.

16. (c)

Statement 1 is correct: NHRC was established under the Protection of Human Rights Act, 1993, making it a **statutory body**.

Statement 2 is correct: It has powers of a civil court: While inquiring into complaints, NHRC has powers of a civil court under the Code of Civil Procedure (CPC), 1908 (e.g., summoning, examining witnesses, etc.).

17. (c)

Context

- Tihar Jail, the largest prison complex in South Asia, is set to be relocated to the outskirts of the national capital.

About

- Established in 1958 in West Delhi, Tihar functioned under Punjab's administrative control until 1966, despite being geographically located in Delhi.
- The jail, designed to hold 5,200 inmates, currently houses around 13,000 prisoners, highlighting severe overcrowding.

Do you know?

- **Prisons** are a **State Subject** under the **7th Schedule** of the Indian Constitution.
- The Delhi government has legislative and executive powers over administration of services except for **public order, police and land**.

18. (c)

Both statements are correct: The Medical Termination of Pregnancy (MTP) Act permits abortions in **specific predetermined situations**.

- **In 1971, the MTP Act** was enacted by Parliament as a **"health" measure**, to **decriminalise abortion in certain defined circumstances** and under due supervision of registered medical practitioners.
 - A pregnancy could only be terminated **under Section 3(2)** if it **did not exceed 20 weeks**.
 - It laid down that the pregnancy can be terminated on the opinion of **one doctor if it is done within 12 weeks** of conception and **two doctors if it is done between 12 and 20 weeks**.
 - **The MTP Act applies to both private and public healthcare settings.**
- **The 2021 amendment to the MTP Act:** Rule 3B permitted **abortion up to 24 weeks** for women due to change of marital status during the ongoing pregnancy, besides in cases of survivors of rape, victims of incest, and other vulnerable women.
 - It also replaced the word **"by any married woman or her husband"** with the words **"any woman or her partner"**, bringing within the fold of the law **pregnancies outside marriage institutions**.
 - **After 24 weeks**, the MTP Act requires **medical boards of expert doctors to be set up by the state government** in each district, which opine on whether to allow termination of pregnancy in case of **substantial foetal abnormality**.

19. (a)

[SOL] Statement 1 is correct: CBI is India's specialized investigative agency, responsible for tackling high-profile crimes, corruption, and national security matters.

- **Founded:** CBI was established in **1963** on the recommendation of the **Santhanam Committee on Prevention of Corruption**.
- **Ministry:** Ministry of Personnel, Public Grievances, and Pensions.

Statement 2 is not correct: Director: The CBI is headed by a Director for a tenure of **2 years**, appointed by the central government on **recommendation by a three-member Appointment Committee**.

20. (c)

[SOL] In News: The **19th report of Parliament's Public Accounts Committee (PAC)** called for a comprehensive overhaul of the GST framework, proposing a **revamped 'GST 2.0'** to address procedural inefficiencies and compliance challenges.

Statement 1 is correct

- **Public Accounts Committee (PAC)** was established in 1921, under the **Government of India Act, 1919 (Montague Chelmsford Reforms)**;
 - The Finance Member of the Executive Council used to be the Chairman of the Committee.

Statement 2 is correct

- **Total Members of PAC:** 22 (**Lok Sabha:** 15 members; **Rajya Sabha:** 7 members); Members are **not from the ruling party's Council of Ministers**.
- **Chairperson:** Traditionally from the opposition party in Lok Sabha.

Statement 3 is correct

- **Appointment:** Members are elected annually by **proportional representation**.
- **Tenure:** 1 year

21. (b)

Statement 1 is not correct: Child Labour (Prohibition & Regulation) Act, 1986: Prohibited child labour in hazardous occupations and regulated work in other sectors.

- Act expanded over time with Child Labour Technical Advisory Committee.
- **Amendment (2016):** Prohibited **child employment below 14 years in all occupations**.
- Extended prohibition to adolescents (14-18 years) in hazardous jobs. **Hence, Statement 2 is correct.**

■■■■

GEOGRAPHY

1. With reference to the Avalanche, consider the following statements:

1. It is a rapid flow of snow, ice, and debris down a slope.
2. The speed of an avalanche is usually slower than a landslide.

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. With reference to Chambal River, which of the following statements is/are correct?

1. The Chambal originates from the Vindhyan range, Madhya Pradesh.
2. It flows through Madhya Pradesh, Rajasthan, Uttar Pradesh and Gujarat.

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. 'Kurd Ethnic Group' recently seen in the news, belongs to which of the following regions?

1. Iran
2. Turkey
3. Iraq
4. Syria

Select the correct answer using the code given below:

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

4. Which of the following phenomena are associated with the solar maximum?

1. Increased solar radiation
2. More sunspots on the Sun's surface
3. Higher frequency of geomagnetic storms on Earth

Select the correct answer using the code given below:

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

5. Consider the following statements regarding the Antarctic Circumpolar Current (ACC):

1. It is the world's strongest ocean current, significantly stronger than the Gulf Stream.
2. The ACC connects the Pacific, Atlantic, and Indian Oceans.
3. It moves counterclockwise around Antarctica, preventing warm waters from reaching the continent.

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

6. Which of the following rivers contribute to the formation of Majuli Island?
- (a) Brahmaputra and Kosi (b) Brahmaputra and Teesta
(c) Brahmaputra, Subansiri, and Lohit (d) Brahmaputra, Ganga, and Yamuna
7. Consider the following statements regarding the Dnipro River:
1. The river originates in the Ural Mountains of Russia and flows into the Caspian Sea.
 2. The Dnipro River divides Ukraine into Right-Bank and Left-Bank regions.
 3. The capital city of Kyiv is situated on its banks.
- 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
8. Bangus Valley, recently seen in the news, lies in which of the following mountain ranges?
- (a) Zaskar Range (b) Karakoram Range
(c) Dhauladhar Range (d) Pir Panjal Range
9. Vanuatu, an island nation recently seen in the news, is located in which of the following regions?
- (a) Caribbean Sea (b) Indian Ocean
(c) South Pacific Ocean (d) Mediterranean Sea
10. With reference to the Mauritius, consider the following statements:
1. It is an island nation in the western Indian Ocean, close to India.
 2. Mauritius celebrates National Day on March 12, in honor of the date of Mahatma Gandhi's Dandi March.
- 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. Consider the following statements regarding the Betwa River:
1. It originates in the Vindhya Range and is a tributary of the Ganga River.
 2. The river flows through the states of Madhya Pradesh and Uttar Pradesh.
 3. The Ken-Betwa River Link Project was approved in 2021 to address water scarcity issues.
 4. The Betwa River is mentioned in the Mahabharata and was associated with the Chedi Kingdom.
- Which of the above statements are correct?
- (a) 1, 2, and 3 only (b) 2, 3, and 4 only
(c) 1 and 3 only (d) 1, 2, 3, and 4
12. With reference to microlightning, consider the following statements:
1. Microlightning refers to extremely small-scale electrical discharges that occur within clouds and are usually undetectable by conventional lightning detection systems.
 2. It plays a crucial role in cloud electrification and can contribute to the formation of larger lightning strikes.
 3. Microlightning primarily occurs in the lower atmosphere and is closely linked to ground-level air pollution.

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. The Hindu Kush Himalayan (HKH) region, extends to which among the following countries?

1. Afghanistan
2. Bangladesh
3. Myanmar

Select the correct answer using the code given below:

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

14. Okjökull, the first glacier to be officially declared dead, is located in which of the following countries?

- (a) Denmark (b) Iceland
(c) The United States of America (d) Canada

15. With reference to the Black sea, consider the following statements:

1. The Black Sea is bordered by six countries, including Turkey, Ukraine, and Russia.
2. The Black Sea is connected to the Mediterranean Sea via the Bosphorus Strait, the Sea of Marmara, and the Dardanelles Strait.
3. The Black Sea is known for its lack of oxygen in its deeper layers, making it an anoxic body of water.

How many of the statements given above are correct?

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

16. Which of the following states does NOT share a boundary with Myanmar?

- (a) Arunachal Pradesh (b) Manipur
(c) Nagaland (d) Tripura

17. The Ningaloo Reef, a UNESCO World Heritage site recently seen in the news, is located in:

- (a) Maldives (b) Indonesia
(c) Mexico (d) Australia

18. Consider the following statements about the Sagaing Fault:

1. It is a major geological fault that runs north to south through central Myanmar.
2. The fault marks the boundary between the Indian Plate and the Eurasian Plate.

Which of the statements given above is/are correct?

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

EXPLANATIONS

1. (a)

Statement 1 is correct: A rapid descent of snow, rock, ice, and other materials down a mountainside.

- Snow avalanches, the most common type, can travel faster than **320 km/h (200 mph)**.

Statement 2 is not correct: During a landslide mass of rock, soil, or debris sliding down a hillside.

- **The speed varies, landslide is typically slower than avalanches.**

2. (a)

Chambal River

- **Source:** The Chambal originates from the **Janapav Hills** in the **Vindhyan range, Madhya Pradesh**.
- **Course:** It flows through Madhya Pradesh, Rajasthan, and enters Uttar Pradesh, where it joins the Yamuna River.
- **Tributary:** Banas, parvati, kali sindh, Shipra
- **Dams:** Gandhi Sagar dam, Rana Pratap Sagar dam, Jawahar Sagar Dam
- **Geological Significance:** Chambal flows through the **Malwa Plateau** and forms **deep gorges** in the Vindhyan and Aravalli Hills.
 - Its basin is prone to **ravine formation** due to soil erosion, especially in Madhya Pradesh and Rajasthan.

3. (d)

Kurds: Ethnic group of about 40 million, mainly in **Iran, Iraq, Syria, and Turkey**.

- Speak various Kurdish dialects, not related to Turkish or Arabic; mostly **Sunni Muslims**.
- **In Syria**, Kurdish-led Syrian Democratic Forces (SDF) control the northeast.
- **Concerns:** They were promised a nation post-WWI, but never granted.
 - Faced rebellions, state suppression of language and culture.
- **Insurgency:** The group launched an armed insurgency against the Turkish state in the early 1980s, originally seeking independence for the Kurds.
 - They make up **about 15%** or more of Turkey's population.
- **Peace Efforts:** Multiple efforts to end the Turkey-PKK conflict have been made, but all of them collapsed.

4. (d)

Context

- NASA has launched the **Polarimeter to Unify the Corona and Heliosphere (PUNCH)** Mission, aligning with the solar maximum phase of the Sun's cycle.

What is the solar cycle?

- The Sun, like a bar magnet, possesses a magnetic field with north and south poles.
- This magnetic field is generated by the movement of electrically charged particles within the Sun.
- Approximately every **11 years**, the **Sun's magnetic field completely flips**, switching its north and south poles—a phenomenon known as the **solar cycle**.

Solar Maximum

- Solar maximum is the peak **phase of the Sun's 11-year cycle**, characterized by heightened solar activity.
- During this period, the Sun emits **more energy, radiation, and light** and experiences an **increased number of sunspots**.
 - The transition occurs when the Sun's magnetic field undergoes a complete flip.
- **Duration:** Solar Maximum lasts between one and two years. The time between two solar maxima can vary from 9 to 13 years.

Impacts of Solar Maximum on Earth

- **Solar Flares and Coronal Mass Ejections (CMEs):** The release of magnetic energy leads to **massive solar storms** that send bursts of radiation and particles into space.

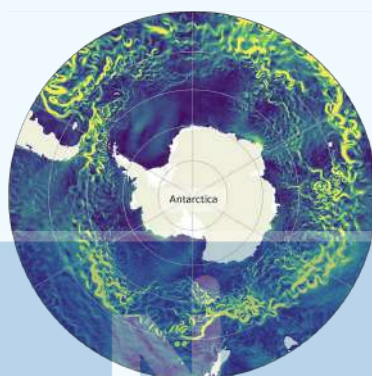
- **Damage to Power Grids:** Intense geomagnetic storms can disrupt electrical infrastructure, leading to power outages.
- **Satellite Malfunctions:** Increased solar radiation affects satellite operations, potentially causing communication and navigation failures.

5. (a)

Context: Scientists warn that the **Antarctic Circumpolar Current (ACC)** could slow by about **20% by 2050** under a high carbon emissions scenario.

About

- **ACC is the world's strongest ocean current.**
 - It's **five times stronger than the Gulf Stream** and **more than 100 times stronger than the Amazon River**.



- It forms part of the global ocean “conveyor belt” connecting the **Pacific, Atlantic and Indian oceans**.
- **ACC's Role:** ACC moves **clockwise** around **Antarctica** and **regulates global climate** by influencing the ocean's ability to **absorb heat and CO2** and **preventing warm waters from reaching Antarctica**.
 - The system **regulates Earth's climate** and pumps water, heat and nutrients around the globe.

6. (c)

Majuli Island is the largest river island in the world, located in the Brahmaputra River in Assam, India. It holds cultural, ecological, and geographical significance and is home to the unique Neo-Vaishnavite tradition. Formed by the confluence of the Brahmaputra River and its tributaries, Subansiri and Lohit. It was declared as India's first island district in 2016.

7. (b)

Statement 1 is not correct: The Dnipro River originates in the Valdai Hills of Russia, not the Ural Mountains, and it flows into the Black Sea, not the Caspian Sea.

Statement 2 is correct: The Dnipro River divides Ukraine into Right-Bank and Left-Bank regions, serving as a significant geographical and cultural boundary.

Statement 3 is correct: The capital city of Kyiv is located on the banks of the Dnipro River.

8. (d)

In News

- J&K govt. to promote Bangus Valley near LoC as an ecotourism destination.

About

- Situated in Kupwara district, Jammu and Kashmir, India.
- Lies in the **Pir Panjal Range** of the Himalayas.
- Encompasses Lashadthura and Boud-Bangus meadows, forming a twin valley system.
- Holds cultural importance for Gujjar and Bakarwal nomadic tribes.

9. (c)

In News

- Former IPL chief Lalit Modi has surrendered his Indian passport and acquired citizenship in Vanuatu which offers a **golden passport program**.

About

- Vanuatu is an island nation in the South Pacific Ocean, located 800 km west of Fiji and 1,770 km east of Australia.
- It is situated along the **seismic Ring of Fire**, known for its high tectonic activity across the Pacific and Southeast Asia.

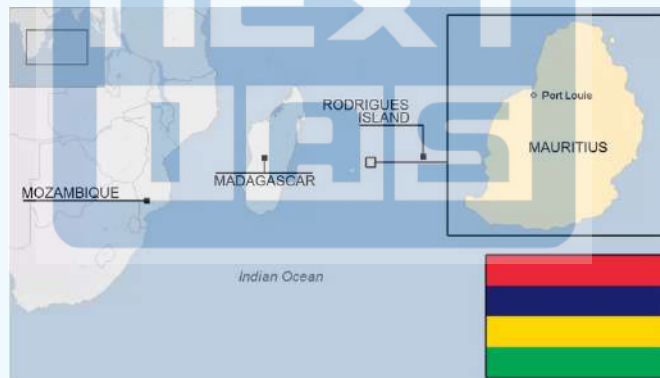


10. (c)

Both the statements are correct:

About Mauritius

- **Location:** Mauritius is a strategically located island nation in the western Indian Ocean, close to India.



- **Population:** Nearly 70% of the population (1.2 million) is of Indian origin, strengthening ties with India.
- **Colonial History:** Mauritius was initially a French colony before becoming a British possession.
- **National Day:** Mauritius celebrates National Day on March 12, in honor of the date of Mahatma Gandhi's Dandi March.

11. (b)

Statement 1 is not correct: The Betwa River originates in Jhirri Village, Sehore District (near Bhopal, Madhya Pradesh), not in the Vindhya Range. It is a tributary of the Yamuna River, not the Ganga.

Statement 2 is correct: The river flows through Madhya Pradesh and Uttar Pradesh.

Statement 3 is correct: The Ken-Betwa River Link Project was approved in 2021 to address water scarcity and inter-basin water transfer.

Statement 4 is correct: The Mahabharata mentions the Betwa River, and it was associated with the Chedi Kingdom, whose capital Suktamati was on its banks.

12. (a)

Statement 1 is correct: Microlightning consists of small-scale electrical discharges within clouds, often undetectable by traditional lightning detection systems due to their low intensity and brief duration.

Statement 2 is correct: These discharges are significant in cloud electrification, influencing the conditions necessary for larger lightning strikes to form.

Statement 3 is not correct: Microlightning typically occurs within clouds at higher altitudes, rather than in the lower atmosphere. While air pollution can influence lightning activity, it is not a primary driver of microlightning.

13. (d)

The HKH mountains extend around **3,500 km over eight countries** — Afghanistan, Bangladesh, Bhutan, China, India, Nepal, Myanmar, and Pakistan.

- These mountains are also called the “**water towers of Asia**” because they are the origins of **10 crucial river systems on the continent** — Amu Darya, Indus, Ganga, Brahmaputra, Irrawaddy, Salween, Mekong, Yangtse, Yellow river, and Tarim.
- These river basins provide water to almost **one-fourth of the world’s population** and are a significant freshwater source for 240 million people in the HKH region.

14. (b)

Satellite images taken more than three decades apart show the **disappearance of Iceland’s Okjökull**.

- It was the first glacier to be officially declared dead as a result of human-caused climate change in **2014**.
- **Okjökull** was a **dome-shaped glacier** situated around the **summit crater on Ok**, a 1,200 meters shield volcano located 71 kilometers northwest of Reykjavík, Iceland.



- In **2023**, Iceland also created the **world’s first iceberg graveyard**, where ice-like headstones were constructed for the 15 major glaciers listed on the **Global Glacier Casualty List**, all of which are either dead or critically endangered.
 - This list includes the **Anderson Glacier in Washington state**, which, in **2015**, became the first U.S. glacier to be declared dead.

15. (c)

The Black Sea is a **large inland body** of water located in **southeastern Europe, bordered by six countries**: Bulgaria, Romania, Ukraine, Russia, Georgia, and Turkey.

- It is connected to the **Mediterranean Sea through the Bosphorus Strait, the Sea of Marmara, and the Dardanelles Strait**.
- The Black Sea deeper water is devoid of oxygen (anoxic) and rich in hydrogen sulfide, which makes it **unsuitable for most marine life**.
 - **The Black Sea does have marine life in its upper, oxygen-rich layers.**

16. (d)

Context

- In 2024, the Union Home Minister announced that the **Free Movement Regime (FMR) along the Myanmar border** would be scrapped but there hasn't been any progress yet.

Brief on India- Myanmar Relations

- Location:** India shares a long land border with Myanmar as well as a maritime boundary in the Bay of Bengal.
 - Four northeastern states, viz., Arunachal Pradesh, Nagaland, Manipur and Mizoram, have a boundary with Myanmar.**



- Diplomatic Relations:** Diplomatic relations between India and Myanmar have generally been friendly, with high-level visits and engagements strengthening ties at the governmental level.
 - India and Myanmar signed a **Treaty of Friendship in 1951**.
- Shared Platforms:** BIMSTEC and Mekong-Ganga Cooperation (MGC).

17. (d)

In News

- A **severe mass coral bleaching event** described as unprecedented is unfolding off Australia's western coast, impacting the **Ningaloo Reef, a UNESCO World Heritage site**.

About

- The event is part of a broader fourth global coral bleaching episode, **ongoing since 2023**.
- The **NOAA reported that nearly 84% of the world's reef areas** have experienced bleaching-level heat stress, impacting over 80 countries and territories.
- The crisis is worsened by **rising global sea surface temperatures, overfishing, and pollution**—challenges that have intensified due to climate change.

18. (c)

Context

- India has launched '**Operation Brahma**' to provide humanitarian assistance to Myanmar, which has been devastated by a **magnitude 7.7 earthquake**, causing widespread death and destruction.

About

- The earthquake was so powerful that its tremors felt across parts of Southeast Asia, including Thailand.
- Myanmar lies between two tectonic plates—the **Indian Plate** and the **Eurasian Plate**—making it particularly **prone to earthquakes**.

The **Sagaing Fault**, running **north to south through central Myanmar**, marks the boundary between these plates. Since 1900, **at least six earthquakes** with a magnitude greater than 7 have occurred near this fault.



GOVERNMENT SCHEMES/ INITIATIVES

1. What is the primary objective of the Swavalambini initiative?
 - (a) Providing employment opportunities for women in government sectors.
 - (b) Enhancing women's participation in entrepreneurship through training and mentorship.
 - (c) Offering financial assistance to women for higher education abroad.
 - (d) Promoting gender equality in political representation.
2. Which of the following statements about the Pradhan Mantri Shram Yogi Maandhan (PM-SYM) Scheme is correct?
 - (a) It provides a ₹3,000 monthly pension after the age of 60.
 - (b) It is applicable to all workers, including government employees.
 - (c) The scheme is administered by the Ministry of Finance.
 - (d) It was launched in the year 2020.
3. Which of the following entities are eligible to receive funding under the Agricultural Infrastructure Fund (AIF)?
 1. Farmer Producer Organizations (FPOs)
 2. Self-Help Groups (SHGs)
 3. Startups and Agribusinesses
 4. Individual Farmers

Select the correct answer using the code below:

(a) 1 and 2 only	(b) 1, 2, and 3 only
(c) 2 and 4 only	(d) 1, 2, 3, and 4
4. Which of the following statements regarding Delhi's Mahila Samridhi Scheme is correct?
 - (a) It provides ₹2,500 monthly to women with an annual income up to ₹3 lakh.
 - (b) Women aged between 18-65 are eligible for this scheme.
 - (c) The scheme is applicable to all women, including government employees.
 - (d) All of the above.
5. Under which scheme has the Pashu Aushadhi Initiative been introduced?
 - (a) Pradhan Mantri Fasal Bima Yojana (PMFBY)
 - (b) Livestock Health & Disease Control Programme (LHDCP)
 - (c) Rashtriya Krishi Vikas Yojana (RKVY)
 - (d) Pradhan Mantri Matsya Sampada Yojana (PMMSY)
6. Consider the following statements regarding the IndiaAI Compute Portal:
 1. It provides access to high-end GPUs at subsidized rates.
 2. It is part of the IndiaAI Mission.
 3. It allows only government institutions to use its resources.

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

7. With reference to the Kisan Credit Card (KCC) Scheme, consider the following statements:

1. It was established on recommendations of the R.V. Gupta Committee.
2. KCC can be used for post-harvest expenses.

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. Which of the following risks are covered under the Pradhan Mantri Fasal Bima Yojana (PMFBY)?

1. Droughts and floods
2. Pests and diseases
3. Post-harvest losses due to hailstorms

Select the correct answer using the code given below:

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

9. Consider the following statements regarding the Parvatmala Programme:

1. It was announced in the Union Budget 2022.
2. The programme mandates 100% indigenous components in ropeway construction under the 'Make in India' initiative.
3. It is being developed under the Public-Private Partnership (PPP) mode.

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. What is the main objective of the Pradhan Mantri Jan Vikas Karyakram (PMJVK)?

- (a) Encouraging entrepreneurship in rural areas.
(b) Providing direct cash benefits to minority communities.
(c) Promoting organic farming among marginalized groups.
(d) Developing community infrastructure and basic amenities in identified areas.

11. Pravaah and Sarthi initiatives, recently seen in the news, are initiatives of:

- (a) NITI Aayog (b) Reserve Bank of India
(c) Ministry of Finance (d) Securities and Exchange Board of India

12. Consider the following statements regarding the Prime Minister Internship Scheme (PMIS):

1. It was launched in 2024 by the Ministry of Skill Development and Entrepreneurship.
2. The scheme aims to provide internship opportunities to 1 crore youth over a period of 5 years.
3. It is focused on providing training to young individuals aged 18 to 25 years.
4. The scheme offers a 12-month paid internship with monthly financial assistance of ₹5,000 per intern.

Which of the statements given above is/are correct?

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

- 13.** The Online Assurances Monitoring System (OAMS), recently seen in the news, is:
- (a) A platform for tracking government assurances made in Parliament
 - (b) An e-governance portal for monitoring public grievances
 - (c) A digital platform for managing online petitions
 - (d) A system for tracking RTI applications
- 14.** Which of the following are components of Rashtriya Gokul Mission?
- 1. Nationwide Artificial Insemination Program
 - 2. Progeny Testing and Pedigree Selection
 - 3. Implementation of In-Vitro Fertilization (IVF) Technology
- Select the correct answer using the code given below:
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
- 15.** The APAAR ID, recently seen in the news, is related to which of the following?
- (a) Aadhaar-linked health records for citizens
 - (b) Unique identification for the apparel industry
 - (c) A digital ID for managing students' academic credits
 - (d) A portal for tracking government scholarships
- 16.** The Sahyog Portal, recently seen in the news, is associated with which of the following?
- (a) A platform launched by the Ministry of Home Affairs for centralized content-blocking orders.
 - (b) An e-governance portal for direct benefit transfer (DBT) schemes.
 - (c) A digital platform for tracking missing persons by the Ministry of Women and Child Development.
 - (d) An online platform by the Ministry of External Affairs for diaspora engagement.
- 17.** Consider the following statements regarding the Eklavya Model Residential Schools (EMRS):
- 1. It is one of the flagship initiatives of the Union Ministry of Education.
 - 2. Every block with more than 50% Scheduled Tribe population and at least 20,000 tribal persons, will have an EMRS.
- Which of the statements given above is/are correct?
- (a) Only 1
 - (b) Only 2
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
- 18.** The "TB Champions" initiative, focusing on Tuberculosis (TB) survivors advocating for early detection and treatment adherence, is launched in which of the following states?
- (a) Punjab
 - (b) Uttar Pradesh
 - (c) Bihar
 - (d) Meghalaya
- 19.** The PM VIKAS Scheme, recently seen in the news, mainly focuses on which among the following?
- (a) Promotion of renewable energy projects in rural areas.
 - (b) Financial inclusion through digital literacy programs.
 - (c) Agricultural reforms for small and marginal farmers.
 - (d) Upliftment of minority communities.

20. With reference to Samagra Shiksha Scheme, consider the following statements:
1. It is being implemented by the Department of School Education and Literacy as a centrally sponsored scheme.
 2. It provides holistic support for school education from pre-primary to class XII, in line with the Sustainable Development Goal for Education (SDG-4).
 3. It also supports education in border and tribal areas through various targeted programs.
- How many of the above statements are correct?
- (a) Only one (b) Only two
(c) All three (d) None
21. The recently launched BioSaarthi Initiative aims to:
- (a) Promote organic farming through bio-fertilizers.
 - (b) Facilitate the commercialization of indigenously developed biological products and technologies.
 - (c) Regulate genetically modified crops in India.
 - (d) Train rural youth in biotechnology research.
22. With reference to the Sagarmala Programme, consider the following statements:
1. The Sagarmala Programme focuses solely on establishing major ports across the coastline.
 2. The Sagarmala Startup Innovation Initiative (S2I2) was launched in 2025 to support startups in green shipping and shipbuilding technology.
- 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. (b)
Swavalambini is a structured entrepreneurship initiative designed for young women in Higher Education Institutions (HEIs) to enhance their participation in entrepreneurship. The initiative provides skill development, mentorship, funding support, and incubation opportunities to promote self-employment and economic independence. It is implemented by the **National Institute for Entrepreneurship and Small Business Development (NIESBUD)** in collaboration with NITI Aayog under the **Ministry of Skill Development and Entrepreneurship (MSDE)**.
2. (a)
Pradhan Mantri Shram Yogi Maandhan (PM-SYM)
It is a pension scheme for **unorganised workers** with incomes up to ₹15,000, providing a ₹3,000 monthly pension after 60.
Launched in **2019**, it aims to offer social security to those contributing significantly to India's GDP. Administered by the **Ministry of Labour**, LIC manages the pension fund.
3. (d)
Punjab has utilised 100% of the Rs 4,713 crore allocated to it by the Centre under the **Agriculture Infrastructure Fund (AIF)** scheme.
What is Agricultural Infrastructure Fund (AIF)?
AIF was launched with an aim to provide medium to long-term financing for agriculture **infrastructure projects at the post-harvest stage**.

The scheme is operational from **2020-21 to 2032-33**.

Under AIF, provision for **Rs. 1 Lakh crore loan** has been made through lending institutions with an interest rate cap of **9%** on loans.

Farmers, agripreneurs, primary agriculture cooperative societies, **farmers producer organisations, start-ups, self-help groups (SHGs)**, state sponsored public-private partnerships, state-agencies can apply for funds under this scheme.

Key features

Viable Farming Assets: The scheme now includes the creation of infrastructure for 'viable projects for building community farming assets'.

Integrated Processing Projects: The list of eligible activities under AIF now includes integrated primary and secondary processing projects.

However, standalone secondary projects remain ineligible and will continue to be covered under Ministry of Food Processing Industries (MoFPI) schemes.

PM KUSUM Component-A Integration with the AIF has been allowed by the government.

Interest Subvention: Offers 3% interest subvention per annum on loans up to ₹2 crore.

Credit guarantee coverage through Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE).

4. (a)

Context: Under Delhi's Mahila Samridhi Scheme, women with an annual income up to ₹3 lakh are eligible for a ₹2,500 monthly payout.

About

Only those aged between 18 and 60, who do not hold government jobs and are not receiving any other government financial assistance, will get the grant under this scheme.

The government has estimated that around 15-20 lakh women will meet the criteria.

5. (b)

Context

The Union Cabinet approved the Revision of **Livestock Health and Disease Control Programme (LHDCP)**.

The Pashu Aushadhi is a new component added to the LHDCP scheme.

About

The aim of the Livestock Health & Disease Control scheme is to improve the

Animal health sector by way of implementation of prophylactic vaccination programmes against various diseases of livestock and poultry,

Capacity building, disease surveillance and strengthening of veterinary infrastructure.

The revised scheme has three components namely: National Animal Disease Control Programme (NADCP), LH&DC and Pashu Aushadhi.

The total outlay of the scheme is **Rs.3,880 crore** for two years i.e. **2024-25 and 2025-26**.

Pashu Aushadhi Initiative

Financial Allocation: **₹75 crore** has been earmarked to support the provision of affordable generic veterinary medicines and incentives for their sale.

Generic medicines are basically non-branded drugs, which are marketed under a non-proprietary or approved name rather than a proprietary or brand name.

Distribution Network: The medicines will be made available through **PM-Kisan Samridhi Kendras** and **Cooperative Societies**, ensuring easy access for farmers.

6. (a)

Statement 1 and 2 are correct: The IndiaAI Compute Portal offers access to **high-performance GPUs**, including models like NVIDIA's H100, at rates subsidized by up to 40% for eligible users. It is part of the **IndiaAI Mission**. The portal is a strategic initiative under the IndiaAI Mission, aiming to democratize access to AI computing resources. It allows only government institutions to use its resources.

Statement 3 is not correct: The portal is designed for a broad range of stakeholders, including central ministries, state governments, startups, researchers, and academic institutions, **not exclusively government entities**.

7. (c)

In News: Recent data reveals that bad loans under the **Kisan Credit Card (KCC) scheme** have surged by 42% over the past four years, highlighting the financial stress in the agricultural sector.

Statement 1 is correct: **Kisan Credit Card (KCC) Scheme (1998)** is designed to provide **short-term credit to farmers** for agricultural and allied activities, based on the recommendations of the **R.V. Gupta Committee**.

Statement 2 is correct: Loan Coverage:

Covers crop production needs (seeds, fertilizers, pesticides, etc.).

Includes working capital for allied activities like dairy, poultry, and fisheries.

Can be used for **farm machinery, irrigation, and post-harvest expenses**.

8. (d)

In News: The Government has approved the continuation of Pradhan Mantri Fasal Bima Yojana (PMFBY) and **Restructured Weather Based Crop Insurance Scheme (RWBCIS)** till 2025-26.

Pradhan Mantri Fasal Bima Yojana (PMFBY) was introduced in the Kharif 2016 season and is available for all States/UTs.

It is voluntary for both States and farmers.

The maximum premium payable by the farmer will be 2% for the Kharif food and oilseed crops.

For rabi food and oilseeds crop, it is 1.5% and for yearly commercial or horticultural crops it will be 5%. The remaining premium is subsidized by the government.

The scheme covers **natural disasters (droughts, floods), pests, and diseases, along with post-harvest losses due to local risks like hailstorms and landslides**.

9. (c)

The Cabinet Committee on Economic Affairs (CCEA), chaired by Prime Minister has approved two major ropeway projects in Uttarakhand under the **National Ropeways Development Programme – Parvatmala Pariyojana**.

About

Parvatmala was announced in the 2022 Budget under the **Public-Private Partnership (PPP) mode**. Implemented by National Highway Logistics Management Limited (NHLML) under the Ministry of Road Transport and Highways (MoRTH).

Aims to develop 250+ ropeway projects covering 1,200 km in five years.

Aligned with the 'Make in India' initiative, the programme mandates at **least 50% indigenous components in ropeway construction**.

Significance of Ropeways

Addresses connectivity challenges in remote & hilly areas.

Boosts tourism & economy

Provides a direct aerial route, bypassing difficult terrains.

Minimal deforestation and land degradation.

10. (d)**In News**

The National Review Meeting was conducted by the Ministry of Minority Affairs to assess the progress of the **Pradhan Mantri Jan Vikas Karyakram (PMJVK)**.

The Pradhan Mantri Jan Vikas Karyakram (PMJVK)

It is a **Centrally Sponsored Scheme** aimed at developing community infrastructure and basic amenities in 1300 identified areas across India.

The scheme, restructured in May 2018, focuses on reducing socio-economic gaps

It is implemented through State Governments/Union Territory (UT) Administrations.

It operates on a fund-sharing pattern between the Centre and States/UTs.

11. (b)**Context**

Recently, the Reserve Bank of India (RBI) has been awarded the Digital Transformation Award 2025 for Digital Initiatives by Central Banking, London.

It highlights the RBI's commitment to innovation and efficiency in governance through its groundbreaking digital initiatives, Pravaah and Sarthi.

Digital Initiatives By RBI

Sarthi System: It is an internal workflow digitization system that has streamlined record management, automated processes, and enhanced data analysis.

Pravaah System: It serves as a digital regulatory application platform for external users.

12. (b)

Statement 1 is not correct: The Prime Minister Internship Scheme (PMIS) was launched in 2024 by the Ministry of Corporate Affairs, not the Ministry of Skill Development and Entrepreneurship.

Statement 2 is correct: The scheme aims to provide internship opportunities to 1 crore youth over a period of 5 years.

Statement 3 is not correct: The scheme targets youth aged 21 to 24 years, not 18 to 25 years.

Statement 4 is correct: The internship duration is 12 months, and interns receive ₹5,000 per month as financial assistance along with a one-time grant of ₹6,000.

13. (a)

In Context: The Union Parliamentary Affairs Minister recently highlighted the role of the **Online Assurances Monitoring System (OAMS)** in managing government assurances.

About

It is a digital platform implemented by the **Ministry of Parliamentary Affairs (MoPA)** to enhance transparency and efficiency in **managing government assurances**.

Assurances are promises, undertakings, or commitments given by Ministers during answers to parliamentary questions or debates.

Assurances should ideally be fulfilled within three months of being made.

The **Ministry of Parliamentary Affairs (MoPA)** is responsible for implementing assurances under the **Government of India (Allocation of Business) Rules, 1961**.

14. (d)

In News: The Union Cabinet approved the Revised Rashtriya Gokul Mission (RGM) with an additional allocation of ₹1,000 crore, bringing the total budget to ₹3,400 crore for the 2021-2026 period under the 15th Finance Commission.

Rashtriya Gokul Mission was launched in December 2014 with a view to conserve and develop indigenous bovine breeds.

The Department of Animal Husbandry and Dairying is implementing the Rashtriya **Gokul Mission**. It focuses on development and conservation of indigenous bovine breeds, genetic upgradation of bovine population and enhancement of milk production and productivity of bovines thereby making milk production more remunerative to the farmers.

Major Components

Nationwide Artificial Insemination Program: It aims to boost the milk production and productivity of bovines, including indigenous breeds.

Progeny Testing and Pedigree Selection: It aims to produce high genetic merit bulls, including bulls of indigenous breeds.

Implementation of In-Vitro Fertilization (IVF) Technology: The technology has an important role in genetic upgradation of bovine population in single generation.

15. (c)

Context: Activists and parents have raised concerns over the rapid push by schools to create APAAR IDs, despite it being voluntary.

What is the APAAR ID?

APAAR (Automated Permanent Academic Account Registry) ID is a unique **12-digit code** that will help students to digitally store, manage, and access all their academic credits, including Score card, marksheets, gradesheet, degrees, diplomas, certificates & co-curricular accomplishments.

This initiative is part of the **'One Nation, One Student ID' program** launched by the Ministry of Education, aligning with the new **National Education Policy of 2020**.

The ID is generated through the Unified District Information System For Education Plus (**UDISE+**) portal, which contains regional academic statistics and data on schools, teachers and students.

16. (a)

Context

X Corp, formerly known as Twitter Inc., is challenging the Indian government's approach to **content blocking on its platform**, particularly in relation to the **Sahyog portal**.

About

At the heart of the issue is the **invocation of Section 79(3)(b) of the Information Technology Act, 2000**, which X Corp believes is being used inappropriately to issue content-blocking orders.

The Sahyog Portal: It was launched by the **Ministry of Home Affairs in 2024**.

The portal acts as a **centralized system** for government agencies at **various levels**—ranging from ministries to local police stations—to issue blocking orders more efficiently.

X Corp has asked the Karnataka High Court to intervene and ensure that **content blocking can only occur under Section 69A**.

This legal battle is part of a **broader tension between social media platforms and governments worldwide** over the regulation of online content and the **balance between freedom of expression and national security concerns**.

17. (b)

Context

A parliamentary panel on social justice asked the Union government to “urgently” pursue the **centralisation of Eklavya Schools**.

About

Eklavya Model Residential Schools (EMRS) are a network of government schools established with the aim of providing quality education to Scheduled Tribe (ST) students in remote and rural areas. Every block with more than **50% ST population** and at least 20,000 tribal persons, will have an EMRS.

The Ministry has set the target to **set up 728 EMRSs** across the country by the **year 2026**.

Establishment: Introduced by the **Ministry of Tribal Affairs** in **1997-98**.

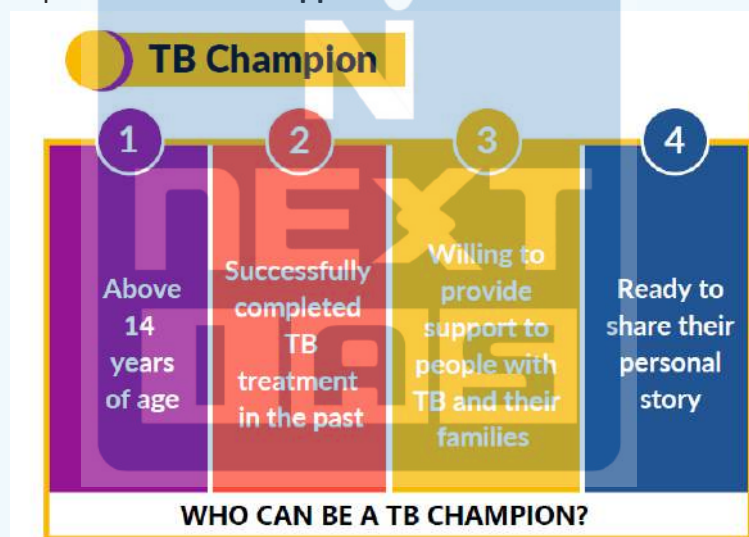
Curriculum: Eklavya schools follow the National Curriculum Framework (NCF) and aim to provide education from the elementary level up to the senior secondary level (Class 12).

18. (d)

The **Meghalaya** government is pushing for a **TB-free State** by re-skilling TB survivors and bringing them back into control programmes as ‘**TB champions**’.

A TB Champion is a person who has been **affected by TB and successfully completed the treatment**.

As survivors, they can provide **valuable support to those with TB and their families**.



19. (d)

Context

The Union Minister of Minority Affairs & Parliamentary Affairs, reaffirmed that the **PM VIKAS Scheme** focuses on **upliftment of minority communities**.

About

The **Pradhan Mantri Virasat Ka Samvardhan (PM VIKAS)** is a **Central Sector Scheme** by the Ministry of Minority Affairs, focusing on the **upliftment of six notified minority communities** (Muslims, Sikhs, Christians, Buddhists, Jain and Zoroastrians (Parsis)).

Merges five schemes: ‘Seekho Aur Kamao’, ‘Nai Manzil’, ‘Nai Roshni’, ‘USTTAD’, and ‘Hamari Dharohar’.

Key Focus Areas:

Skilling and Training: Both non-traditional and traditional skills.

Women Leadership and Entrepreneurship: Empowering women through leadership and business opportunities.

Education: Provided through the National Institute of Open Schooling.

Infrastructure Development: Through Pradhan Mantri Jan Vikas Karyakram.

Credit Linkages: Connecting beneficiaries with loan programs from the National Minorities Development & Finance Corporation (NMDFC).

20. (c)

In News : A Parliamentary Standing Committee has urged the Ministry of Education to resolve the dispute with West Bengal, Kerala, and Tamil Nadu regarding the non-release of over ₹4,000 crore in funds under the **Samagra Shiksha Abhiyan (SSA)**.

Statements 1, 2 and 3 are correct : The Department of School Education and Literacy is implementing an integrated **centrally sponsored scheme** for School education - Samagra Shiksha. The scheme treats school education holistically, without segmentation from **pre-primary to class XII** and is in accordance with the **Sustainable Development Goal for Education (SDG-4)**. The scheme provides support for the implementation of the RTE Act.

The Scheme has been aligned with the recommendations of the National Education Policy (NEP) 2020.

It offers financial assistance to States and UTs for activities like opening/strengthening schools, building infrastructure, setting up Kasturba Gandhi Balika Vidyalyas, providing hostels for marginalized groups, offering free uniforms and textbooks, and conducting enrolment and retention drives. The **scheme also supports education in border and tribal areas through various targeted programs.**

21. (b)

The BioSaarthi Initiative is a global mentorship program launched by the Department of Biotechnology (DBT) and the Biotechnology Industry Research Assistance Council (BIRAC). Its aim is to support Indian biotech startups by connecting them with experienced mentors, including those from the Indian diaspora, to help them expand their reach and business, and ultimately facilitate the commercialization of their indigenously developed biological products and technologies.

22. (b)

Sagarmala Programme

Objectives: To streamline logistics, reduce costs, and enhance international trade competitiveness by shifting from traditional, infrastructure-heavy transport to efficient coastal and waterway networks.

The program focuses on port modernization, industrial growth, job creation, and sustainable coastal development, ensuring minimal infrastructure investment while maximizing economic impact.

Components:

The program consists of several key components aimed at transforming India's maritime sector. The overall set of projects under the Sagarmala Programme are divided into 5 pillars.



Implementation Mechanism:

Major Ports, central ministries, State Governments, state maritime boards, and other relevant agencies execute projects.

Projects are selected based on the Master Planning of Major Ports, meetings of the National and State Steering Committees.

Funding Structure:

Many projects are funded through the internal resources of MoPSW agencies, including Major Ports.

Priority is given to private sector participation, with PPP models implemented wherever feasible.

Achievements:

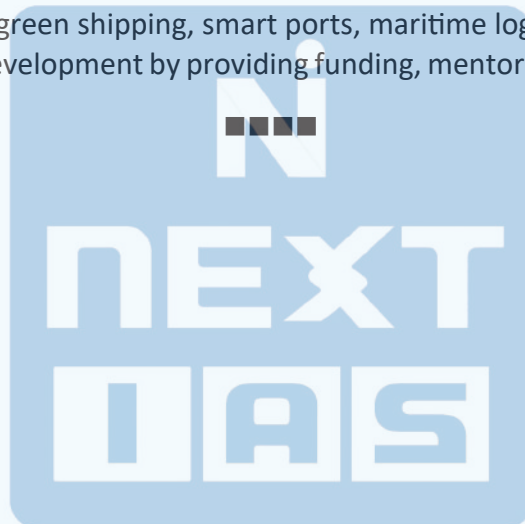
Coastal shipping grew 118% in a decade, Ro-Pax ferries moved over 40 lakh passengers, and inland waterway cargo rose 700%.

Nine Indian ports rank in the world's top 100, with Vizag in the top 20 container ports.

Sagarmala Startup Innovation Initiative (S2I2)

Launched on **March 19th 2025**, it is a transformative program designed to **foster innovation and entrepreneurship in India's maritime sector**.

S2I2 supports startups in green shipping, smart ports, maritime logistics, shipbuilding technology, and sustainable coastal development by providing funding, mentorship, and industry partnerships.



DEFENSE/ INTERNAL SECURITY

1. Exercise Desert Hunt 2025, recently seen in the news, is
 - (a) A joint military exercise between India and the USA
 - (b) A joint military exercise between India and Saudi Arabia
 - (c) A Tri-Service Special Forces exercise conducted by India
 - (d) A counter-insurgency operation in Northeast India
2. With reference to the Central Industrial Security Force (CISF), consider the following statements:
 1. It is a paramilitary force established in 1969, under the Central Industrial Security Force Act.
 2. It operates under the Ministry of Defence.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. 'Exercise Ajeya Warrior' is a joint military exercise between India and which of the following countries?
 - (a) Australia
 - (b) United Kingdom (UK)
 - (c) United States (US)
 - (d) United Arab Emirates (UAE)
4. Exercise Khanjar is a joint military exercise between India and which country?
 - (a) Kazakhstan
 - (b) Kyrgyzstan
 - (c) Uzbekistan
 - (d) Turkmenistan
5. According to the Stockholm International Peace Research Institute (SIPRI) report 2020–24, which country became the world's largest importer of major arms?
 - (a) India
 - (b) Saudi Arabia
 - (c) Ukraine
 - (d) China
6. Consider the following statements with reference to Mission Amrit Sarovar.
 1. It was launched in 2022 to rejuvenate 500 Amrit Sarovars (ponds) in each district across the country.
 2. Its works are being funded solely by the central government without any private sector involvement.Which of the statements given above is/are correct?
 - (a) Only 1
 - (b) Only 2
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
7. Consider the following statements regarding the Astra missile:
 1. It is an advanced beyond-visual-range air-to-air missile developed by the DRDO.
 2. It is capable of exceeding Mach 4 in speed and reaching a maximum altitude of 20 km.Which of the statements given above is/are correct?
 - (a) Only 1
 - (b) Only 2
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

8. VARUNA is a bilateral naval exercise between India and which one of the following countries?
- (a) United Kingdom (b) Japan
(c) France (d) Australia
9. The 'Project 75 & Project 75I', sometimes appeared in the news, are related to:
- (a) Development of Fifth Generation Fighter Aircrafts
(b) Construction of Submarines
(c) Developing Guided-missile Destroyers
(d) Acquisition of Frigates
10. The term 'Triput' and 'Tavasya', recently seen in the news, are
- (a) Frigates (b) Aircraft Carriers
(c) Submarines (d) Corvettes
11. With reference to the Pradhan Mantri Matru Vandana Yojana (PMMVY), consider the following statements:
1. All women above 18 years of age are eligible under the scheme.
 2. The scheme is applicable only for the first pregnancy.
- 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. 'Prachand Prahar,' recently seen in the news, is:
- (a) A tri-service multi-domain exercise by the Indian Armed Forces.
(b) A joint naval drill between India and France.
(c) A counter-terrorism operation in Jammu and Kashmir.
(d) A joint counter-terrorism operation by India and Nepal.
13. With reference to the Nag Missile System (NAMIS), consider the following statements:
1. It is a third-generation, fire-and-forget anti-tank guided missile system.
 2. The system is integrated on a tracked carrier platform called NAMICA for enhanced battlefield mobility.
 3. NAMIS has been imported under the Buy (Global) category.
- 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. Consider the following Indian humanitarian operations with the respective countries they assisted:

	<i>Operations</i>	<i>Countries Assisted</i>
1.	Operation Maitri	Nepal
2.	Operation Dost	Türkiye and Syria
3.	Operation Sadbhav	Afghanistan

Which of the pairs given above is/are correctly matched?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) None of the above

15. The Battle of Khanwa (1527) was fought between:

- | | |
|----------------------------|-------------------------------|
| (a) Babur and Ibrahim Lodi | (b) Humayun and Rana Sanga |
| (c) Rana Sanga and Babur | (d) Akbar and Maharana Pratap |

EXPLANATIONS

1. (c)

Context

- The Indian Air Force conducted **Exercise Desert Hunt 2025**, an integrated Tri-Service Special Forces exercise, at Air Force Station Jodhpur, Rajasthan.

About

- The exercise involved **Para (Special Forces)** of the Indian Army, **Marine Commandos (MARCOS)** of the Indian Navy, and **Garud (Special Forces)** of the Indian Air Force.
- It aimed to **enhance interoperability, coordination, and synergy** among the three Special Forces units for **swift and effective responses** to security challenges.
- Key operations included:** airborne insertion, precision strikes, hostage rescue, counter-terrorism operations, combat free falls and urban warfare scenarios wherein the combat readiness of the forces was tested under realistic conditions.

2. (a)

Statement 1 is correct: It is a paramilitary force established in **1969**, under the **Central Industrial Security Force Act, 1968**.

- Every year, **CISF Raising Day is observed on March 10**.

Statement 2 is not correct: The force is led by a **Director General (DG)** and operates under the **Ministry of Home Affairs of India**.

3. (b)

It is a joint military exercise between **India and the United Kingdom**.

- It is a **biennial** training event with the United Kingdom which is conducted alternatively in the United Kingdom and India.

4. (b)

In News: The 12th edition of Exercise Khanjar-XII is set to take place in Kyrgyzstan.

About

- It is a joint special forces exercise.
- It is held annually and conducted alternatively in both the countries.
- Aim: to exchange experiences and best practices in Counter Terrorism and Special Forces Operations in urban and mountainous high altitude terrain scenarios.

5. (c)

Context

- According to the Sweden-based Stockholm International Peace Research Institute (SIPRI), Ukraine became the **world's largest importer of major arms in the period 2020–24**.

About

- Top five arms importers:** Ukraine, India, Qatar, Saudi Arabia and Pakistan.
 - These five countries accounted for **35 percent** of global arms imports.
- Top five arms exporters:** the USA, France, Russia, China and Germany.
 - These exporters contributed **72 percent** of total global arms exports.

- **The US increased** its share of global arms exports to **43 percent**, whereas **Russia's arms exports declined by 64 percent**.
- **China** accounted for **5.9 percent** of global arms exports in 2020–24, a slight decline from its share in 2015–19.

6. (d)

In News: The Indian Railways will dig ponds as part of the Union government's Mission Amrit Sarovar that aims to address the critical issue of water scarcity in the country.

Statements 1 and 2 are not correct : Mission Amrit Sarovar was launched on April 24, 2022, to conserve water for the future by developing and rejuvenating ponds (Amrit Sarovars) across India.

- It aims to develop or rejuvenate **75 Amrit Sarovars** in each district of India, totaling approximately 50,000 ponds nationwide.
- Mission Amrit Sarovar works are being taken up by the States and Districts with convergence from various ongoing schemes such as Mahatma Gandhi National Rural Employment Guarantee Scheme (Mahatma Gandhi NREGS), 15th Finance Commission Grants, Pradhan Mantri Krishi Sishayi Yojna sub-schemes such as the Watershed Development Component, Har Khetko Pani, besides States' own schemes.
- **Public contributions like crowdfunding and Corporate Social Responsibility are also allowed for the work.**

7. (c)

Context: The indigenously-built Tejas light combat aircraft successfully test-fired the **Astra air-to-air missile** off the coast of Chandipur, Odisha.

About

- Developed by the Defence Research and Development Organisation (**DRDO**), Astra is an advanced **beyond-visual-range air-to-air missile (BVRAAM)** designed to engage targets over **100 km away**.
- Equipped with advanced guidance and navigation systems, it ensures **high precision** in target engagement.
- Inducted into the **Indian Air Force (IAF)**, Astra strengthens India's air defense with its ability to achieve speeds exceeding **Mach 4** and reach a maximum altitude of **20 km**, making it highly effective in air combat.

8. (c)

Context

- The 23rd edition of the **annual naval 'Exercise VARUNA'** between **India and France** has commenced in the Arabian Sea.

About Exercise VARUNA

- It was started in **2001** to enhance **interoperability and operational synergy** between India & France.
- **VARUNA 2025** features a series of **drills and manoeuvres** involving underwater, surface, and air operations.

9. (b)

Project 75 and Project 75I are key initiatives under India's defense modernization program, focusing on the **indigenous construction of submarines** for the Indian Navy.

Project 75

- To build six **Scorpene-class submarines** in India; Partnership between India & France.
- These submarines are equipped with advanced stealth capabilities, modern weapon systems, and state-of-the-art technology.

Project 75I

- To construct **six next-generation conventional submarines** with advanced features like Air Independent Propulsion (AIP) systems.
- **Strategic Partnership Model:** The project involves collaboration between Indian companies and foreign Original Equipment Manufacturers from France, Germany, and others.

10. (a)**Context**

- The Goa Shipyard Limited (GSL) launched **Tavasya**, the **second frigate under Project 1135.6 Additional Follow-on Ships**.

About

- In **2016**, **India and Russia** signed an agreement for four additional **Krivak-class frigates**, with two imported and two built in India under technology transfer.
 - **The first frigate, Tripud, was launched in 2024**, with both ships set to be delivered to the Indian Navy by **2026 and 2027**.
- **Tavasya is the second** of the two follow-on **Krivak-class stealth frigates**.
 - 'Tavasya' named after **Bhima's mace**, symbolising naval strength
 - Designed to perform **surface, sub-surface, and air combat operations**.

11. (d)

Both statements are not correct: Pradhan Mantri Matru Vandana Yojana (PMMVY) is a **Maternity Benefit Programme** that is implemented in accordance with the **provision of the National Food Security Act, 2013**.

- **Eligibility:** Women belonging to socially, economically disadvantaged, and marginalised sections of society.
- **Benefits:**
 - Provides ₹5,000 as maternal benefit during pregnancy and lactation.
 - The remaining amount (under Janani Suraksha Yojana) brings the total maternity benefit to ₹6,000 on average.
 - Pregnant women & lactating mothers receive free meals during pregnancy and up to 6 months postpartum through Anganwadis, to meet nutritional standards.
- **Mission Shakti which encompasses the PMMVY Scheme** came into operation from **2022**.
 - **Mission Shakti:** Provides ₹6,000 for a second child if the second child is a girl, promoting positive behavior towards the girl child.

12. (a)**Context**

- The Indian Armed Forces recently conducted a high-level tri-service integrated multi-domain exercise, **Prachand Prahar**, in the high-altitude terrain of Arunachal Pradesh.

About the Exercise

- The exercise showcased the seamless integration of advanced surveillance, strike capabilities, and multi-domain operational planning.
- Cutting-edge platforms such as long-range maritime reconnaissance aircraft, armed helicopters, UAVs, loitering munitions, and space-based assets were employed to achieve total situational awareness and rapid target engagement.
- Prachand Prahar follows **Exercise Poorvi Prahar**, conducted in November 2024, which focused on the integrated application of aviation assets.

13. (a)

Statement 1 is correct: NAMIS is developed by DRDO and is a fire-and-forget, third-generation ATGM.

Statement 2 is correct: It is mounted on a tracked carrier NAMICA (Nag Missile Carrier) for high mobility.

Statement 3 is not correct: NAMIS is indigenously developed and procured under the Buy (Indian-IDDMM) category, not imported.

14. (a)

Context: India has launched '**Operation Brahma**' to provide humanitarian assistance to Myanmar, which has been devastated by a **magnitude 7.7 earthquake**, causing widespread death and destruction.

India's Humanitarian Assistance

- 'Operation Brahma' is part of **India's Act East policy**, and in the past, India has extended similar support, for example:
 - Operation Maitri (2015)** – in the aftermath of 2015 **Nepal's** earthquake
 - Operation Dost (2023)** – to help quake-hit **Turkiye and Syria**
 - Operation Sadbhav (2024)** – to assist typhoon Yagi-affected countries – **Myanmar, Laos and Vietnam**.

15. (c)

Context

- A recent statement by an MP labeling Rajput ruler Rana Sanga as a "traitor" has sparked controversy over historical interpretations of his role, particularly the claim that he invited Babur to invade India and defeat Ibrahim Lodi.

First Battle of Panipat

- Fought between Ibrahim Lodi, the last Sultan of the **Lodi dynasty**, and **Zahir-ud-din Babur**, a Timurid warlord from Central Asia.
- Despite being outnumbered (Babur had 12,000 troops vs Ibrahim's estimated 1 lakh), Babur's use of superior tactics and artillery led to his decisive victory.
- The battle marked the end of the **Delhi Sultanate's Lodi rule (founded by Bahlul Lodi in 1451) and the beginning of Mughal rule in India**.

Rana Sanga (1482–1528)

- Also known as **Maharana Sangram Singh**, he was the **Rajput king of Mewar** (ruled from 1508 to 1528) and is known for uniting various Rajput clans to resist the expanding influence of the **Delhi Sultanate**.
- His kingdom extended across present-day Rajasthan, Gujarat, and parts of Madhya Pradesh, with **Chittor as his capital**.
- He was a patron of the **arts and literature**, supported many artists and poets, including the famous poet **Malik Muhammad Jayasi**, who wrote the epic poem **Padmavat**.
- Military career:** His most notable battle was against Babur at **Khanwa in 1527**, where he aimed to expel the Mughals from India.

Despite suffering a defeat due to **Babur's superior artillery**, Rana Sanga remains a revered figure in Indian history for his courage and vision of a united Rajputana.



INTERNATIONAL RELATIONS

1. With reference to the Cities Coalition for Circularity (C-3), consider the following statements:
 1. It is a multi-nation alliance launched by India to promote city collaboration and knowledge-sharing.
 2. The initiative focuses on waste management and resource efficiency in the Asia-Pacific region.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. With reference to the United Nations Convention on the Law of the Sea (UNCLOS), consider the following statements:
 1. It lays down a comprehensive regime of law and order in the world's oceans and seas establishing rules governing all uses of the oceans and their resources.
 2. It establishes the International Seabed Authority to regulate mining and related activities on the ocean floor beyond national jurisdiction.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. Which of the following organizations established the Intergovernmental Panel on Climate Change (IPCC) in 1988?
 - (a) United Nations Development Programme (UNDP) and World Health Organization (WHO)
 - (b) World Bank and International Maritime Organization (IMO)
 - (c) World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP)
 - (d) Food and Agriculture Organization (FAO) and United Nations Industrial Development Organization (UNIDO)
4. With reference to the Joint Comprehensive Plan of Action (JCPOA) 2015, consider the following statements:
 1. Germany, China, Russia and Iran were among the members of the Agreement.
 2. Iran agreed to allow the International Atomic Energy Agency (IAEA) access to its nuclear facilities.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
5. With reference to the Convention on Cluster Munitions, consider the following statements:
 1. It was signed in 2008, aimed at banning the use, production, transfer, and stockpiling of cluster munitions.
 2. Over 100 countries have signed or ratified the treaty, including India and the United States.

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

6. With reference to United Nations Peacekeeping, which of the following statements is/are correct?
1. The UN Peacekeepers are also known as Blue Helmets.
 2. The first UN peacekeeping mission was established during the Cuban Missile Crisis.

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. Recently, PM Modi received the 'Grand Commander of the Order of the Star and Key of the Indian Ocean' by which of the following Nations?

- (a) Indonesia (b) Tanzania
(c) Seychelles (d) Mauritius

8. The Madrid Protocol and the Hague Agreement are administered by which of the following organizations?

- (a) World Trade Organization (WTO)
(b) World Intellectual Property Organization (WIPO)
(c) International Trademark Association (INTA)
(d) United Nations Conference on Trade and Development (UNCTAD)

9. Consider the following statements regarding the International Criminal Court (ICC):

1. The ICC was established by the Rome Statute.
2. It has jurisdiction over crimes against humanity, genocide, war crimes, and crimes of aggression.
3. The ICC is a judicial organ of the United Nations and operates under the UN Security Council.
4. India is a member of the ICC and has ratified the Rome Statute.

Which of the statements given above is/are correct?

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

10. Consider the following:

1. New Zealand
2. Australia
3. Japan
4. South Korea

Which of the above countries is / are part of the 'Five Eyes Intelligence Alliance'?

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

11. Which of the following statements are correct about the Raisina Dialogue?

- (a) It is a bilateral military exercise between India and Russia
(b) It is India's flagship conference on geopolitics and geo-strategy
(c) It is a regional trade agreement led by India
(d) It is an initiative to resolve only border disputes with neighbouring countries

12. Which among the following countries is a part of the multilateral alliance Squad?

1. United States
2. France
3. The Philippines
4. China

Select the correct answer using the code given below:

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

13. With reference to the 'Indian Ocean Rim Association (IORA)', consider the statements:

1. It was established under the United Nations Charter.
2. India is a founding member of IORA.
3. Chairmanship of IORA is rotated among member states every two years.

Which of the statements given above is/are incorrect?

- | | |
|------------------|----------------------|
| (a) 1 and 2 only | (b) 2 and 3 only |
| (c) 1 and 3 only | (d) All of the above |

14. Consider the following statements regarding the Raisina Dialogue 2025:

1. It was the 10th edition of India's annual flagship conference on geopolitics and geo-economics.
2. The dialogue was jointly hosted by the Observer Research Foundation (ORF) and NITI Aayog.
3. The theme for Raisina Dialogue 2025 was "Kālachakra – People, Peace and Planet."

Which of the statements given above is/are correct?

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

15. Which of the following statements about the United Nations Security Council (UNSC) is/are correct?

1. The UNSC has 15 members, of which 5 are permanent members and 10 are elected for two-year terms.
2. The permanent members of the UNSC hold veto power over substantive resolutions.
3. The UNSC has the authority to deploy peacekeeping missions and impose sanctions.
4. The President of the UNSC is a permanent position held by the United States.

Select the correct answer using the codes below:

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

16. Consider the following foundational agreements between India and United States:

1. Logistics Exchange Memorandum of Agreement (LEMOA)
2. Communications Compatibility and Security Agreement (COMCASA)
3. Basic Exchange and Cooperation Agreement (BECA)

What is the correct order in which India signed above foundational agreements?

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

3. (c)

In News

- Jim Skea, chairperson of the IPCC, stated that the aspiration to limit global warming to 1.5°C is still possible but is “hanging by a slender thread.”

About

- The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).
- It provides scientific information to help governments develop climate policies.
- With 195 member countries, the IPCC plays a key role in international climate change negotiations.

4. (c)

Both the statements are correct: Joint Comprehensive Plan of Action (JCPOA) 2015

• **Participants:**

- **Iran**
- **P5+1:** Five permanent members of the UN Security Council (China, France, Russia, UK, U.S.) plus Germany.
- **EU:** Participated in negotiations.

Iran's Commitments:

- **Nuclear Restrictions:** Iran agreed **not to produce highly enriched uranium** or plutonium for nuclear weapons and to ensure its nuclear facilities (Fordow, Natanz, Arak) focus on **civilian purposes**.
- **Centrifuge Limits:** Iran limited the number, type, and level of its centrifuges, and reduced its stockpile of enriched uranium.
 - Uranium enriched to 5% is for nuclear power; 20% for research or medical use; 90% for weapons.
- **Monitoring and Verification:** Iran agreed to allow the **International Atomic Energy Agency (IAEA)** unfettered access to nuclear facilities, including undeclared sites.
 - A Joint Commission monitors the deal's implementation and resolves disputes, including granting IAEA access to suspicious sites.

5. (a)

Statement 1 is correct: Lithuania withdrew from the **Convention on Cluster Munitions**, citing security concerns over the Russia-Ukraine war.

- It is the **first country to leave the convention**.
- **Adopted:** Signed in **2008** in Oslo, Norway.
- **Purpose:** Aimed at banning the use, production, transfer, and stockpiling of cluster munitions.
 - Seeks to protect civilians from the indiscriminate harm caused by unexploded submunitions.

Statement 2 is not correct: Signatories: Over 100 countries have signed or ratified the treaty.

- Some countries, including major military powers like the **U.S., India, Russia, and China, have not signed the treaty**.

6. (a)

Context

- India actively participates in UN peacekeeping operations, emphasizing dialogue, diplomacy, and cooperation as key pillars of its foreign policy.

What is UN Peacekeeping?

- UN Peacekeeping is a key mechanism used by the **United Nations** to maintain global peace and security.
- It operates alongside other UN efforts, including **conflict prevention, peacemaking, peace enforcement, and peacebuilding**.
- The UN Peacekeepers, known as **Blue Helmets**, get their name from the light blue of the United Nations flag.

History of UN Peacekeeping

- UN Peacekeeping began in **1948** with the establishment of the **United Nations Truce Supervision Organization (UNTSO)** in the Middle East to monitor ceasefires.
- During the Cold War, missions remained limited due to geopolitical tensions, but the end of the Cold War in the **1990s saw a significant expansion** in both the number and scope of peacekeeping operations.

7. (d)

The Prime Minister paid a state visit to **Mauritius**, his second since 2015.

- **Award Conferred:** PM Modi received the **Grand Commander of the Order of the Star and Key of the Indian Ocean**, marking him as the **first Indian recipient**.

8. (b)

Madrid Protocol for Trademark Registration (1989): It allows businesses to register and manage trademarks in multiple countries through a single application. With 115 members covering 131 countries, **including India**, it simplifies trademark protection, reduces costs, and centralizes renewals and modifications.

- **Hague System (1925):** It enables industrial designs to be protected in multiple countries through a single application. Also administered by WIPO, the system has over 70 contracting parties covering 96 countries. However, **India is not a member**.

World Intellectual Property Organization (WIPO)

- It is a **self-funding agency of the United Nations**, that serves the world's innovators and creators, ensuring that their ideas travel safely to the market and improve lives everywhere.
- **History:** WIPO was established in **1967** by the **WIPO Convention**.
- **Members:** The organization has **193** member states including both developing and developed nations like India, Italy, Israel, Austria, Bhutan, Brazil, China, Cuba, Egypt, Pakistan, the U.S. and the U.K.
 - India joined WIPO in **1975**.
- **Headquarters:** Geneva, Switzerland.

9. (a)

Statement 1 is correct: The International Criminal Court (ICC) was established by the Rome Statute, which was adopted on July 17, 1998, and entered into force on July 1, 2002.

Statement 2 is correct: The ICC has jurisdiction over four core international crimes:

- Genocide
- Crimes against humanity
- War crimes
- Crime of aggression (activated in 2018)

Statement 3 is not correct: The ICC is independent of the United Nations (UN) and does not operate under the UN Security Council. However, the UN Security Council can refer cases to the ICC (e.g., Darfur genocide case).

Statement 4 is not correct: India is NOT a member of the ICC and has not ratified the Rome Statute due to concerns over sovereignty, selective prosecution, and the broad definition of war crimes.

10. (b)

In News: The **Five Eyes Intelligence Alliance** is facing challenges due to shifts in U.S. foreign policy during the Presidency of Donald Trump.

- **Five Eyes Intelligence Alliance** is one of the most powerful and secretive intelligence-sharing alliances in the world, comprising the United States, the United Kingdom, Canada, **Australia, and New Zealand**.
- Initially focused on monitoring Soviet communications during the Cold War, the alliance adapted over time to cover terrorism, cyber warfare, and threats from rising global powers.

11. (b)

Raisina Dialogue

- The Raisina Dialogue is India's premier conference on **geopolitics and geo-strategy**, organized annually by the **Ministry of External Affairs (MEA)** in collaboration with **Observer Research Foundation (ORF)**.
- It serves as a global platform for discussions on international affairs, security, and economic policies.

12. (c)

India has been invited to join the **multilateral alliance Squad** to prevent China's influence in the South China Sea.

- The Squad is an **informal alliance** formed in **2024** with countries such as **Australia, Japan, the Philippines and the United States**.
 - The group now plans to **invite India and South Korea to join it**.
- The defence forces of this alliance have **conducted joint maritime activities** in the **exclusive economic zone of the Philippines in the South China Sea**.
- **Aim:** The Squad's joint maritime activities are aimed at providing **strategic responses to tensions in the Philippines' waters** in the South China Sea.

13. (b)

In News: The Indian Ocean Rim Association (IORA) is set to witness a transformative phase under **India's chairship starting November 2025 (it is now Vice-Chair)**.

Statement 1 is not correct

- **Indian Ocean Rim Association (IORA)** is an intergovernmental organization **established in 1997** to foster economic, political, and security cooperation among countries bordering the Indian Ocean, with **23 member states and 12 dialogue partners**.
- It focuses on **six priority areas:** Maritime Security; Trade and Investment Facilitation; Fisheries Management; Disaster Risk Reduction; Academic, Science & Technology Cooperation; and Tourism and Cultural Exchanges.

Statement 2 is correct

- **India, as a founding member of IORA**, along with the countries like Australia, Indonesia, Kenya, Madagascar, Malaysia, Mauritius, Mozambique, Oman, Singapore, South Africa, Sri Lanka, Tanzania, and Yemen.

Statement 3 is correct

- **Chairmanship of IORA** is rotated among member states **every two years**, allowing different nations to shape its strategic vision.

14. (b)

In News

- The 10th edition of the Raisina Dialogue was recently held in New Delhi, bringing together leaders, thinkers, and policymakers from across the globe.

About

- It was co-hosted by the **Observer Research Foundation (ORF)** and the **Ministry of External Affairs, Government of India**.
- **Christopher Luxon**, Prime Minister of New Zealand was the **Chief Guest**.
- The **central theme for 2025** was **"Kālachakra – People, Peace, and Planet,"** emphasizing the interconnectedness of humanity, global harmony, and environmental sustainability.
- The dialogue served as a platform to **discuss pressing global challenges**, including climate change, digital transformation, economic competition, and geopolitical conflicts, aiming to foster collaborative solutions and strengthen international partnerships.
- The dialogue witnessed participation from **representatives of over 125 countries**, including ministers, former heads of state and government, military commanders & industry leaders etc.

15. (c)

Statement 1 is correct: The UNSC consists of 15 members, with 5 permanent members (China, France, Russia, the United Kingdom, and the United States) and 10 non-permanent members elected for two-year terms.

- **Statement 2 is correct:** The permanent members (P5) have veto power over substantive resolutions.
- **Statement 3 is correct:** The UNSC has the authority to deploy peacekeeping missions and impose sanctions to maintain or restore international peace and security.
- **Statement 4 is incorrect:** The presidency of the UNSC rotates every month among the 15 members, and it is not a permanent position held by the United States.

16. (a)

In News: The evolving defence partnership between **India and the United States** has brought significant advancements in technology sharing, joint exercises, and defence procurement, it raises **critical questions about India's strategic autonomy**.

- India and the US have signed several foundational agreements, that have significantly boosted operational coordination, especially in the Indo-Pacific, like:
- **Logistics Exchange Memorandum of Agreement (LEMOA):** It was signed in **2016** to allow the armed forces of both countries to use each other's bases for refueling and resupply.
- **Communications Compatibility and Security Agreement (COMCASA):** It was signed in **2018** to enable secure communications between their military platforms.
- **Basic Exchange and Cooperation Agreement (BECA):** It was signed in **2020** to facilitate sharing of geospatial intelligence and satellite data for military use.

17. (b)

Statement 1 is not correct: Establishment: It was established in **1966** as a financial institution that would be Asian in character and foster economic growth and cooperation.

- **Members:** It has **69 members**, of which **49** are from the Asia-Pacific region including India and **20** are from other parts of the world, including North America and Europe.
- **Objective:** It provides financial assistance to its developing member countries in the form of loans, grants, and technical assistance.

Statement 2 is correct: Highest decision-making body: Board of Governors, consisting of representatives from each member country.

- **Headquarters:** Mandaluyong, Philippines.



SCIENCE & TECHNOLOGY

1. What is 'Ocelot', recently unveiled by Amazon Web Services (AWS)?
 - (a) A new artificial intelligence chatbot
 - (b) A prototype quantum computing chip
 - (c) A cloud-based cybersecurity software
 - (d) A next-generation semiconductor chip for classical computing.
2. Ultra-conserved elements (UCEs), sometimes appeared in news, is primarily in context of:
 - (a) Quantum Entanglement
 - (b) Gene Regulation
 - (c) Processed Food
 - (d) Critical Mineral
3. With reference to Maple Syrup Urine Disease (MSUD), which of the following statements is/are correct?
 1. It is a rare genetic disorder caused by a deficiency of the Branched-Chain Alpha-Keto Acid Dehydrogenase (BCKDH) enzyme complex.
 2. The disease leads to the accumulation of branched-chain amino acids such as leucine, isoleucine, and valine in the body.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
4. With reference to the Euclid Mission (2023), consider the following statements:
 1. It is a collaborative mission between the European Space Agency, the National Aeronautics and Space Administration (NASA) and Indian Space Research Organization (ISRO).
 2. Its mission is to explore the composition and evolution of the dark Universe.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
5. The red colour in Mars, often referred to as the 'Red Planet' is primarily because of:
 - (a) Magnetite
 - (b) Ferrihydrite
 - (c) Siderite
 - (d) Limonite
6. With reference to the Semi-cryogenic Engine, consider the following statements:
 1. It uses the Liquid Oxygen (LOX) and Liquid Hydrogen (LH2) as the propellants.
 2. It increases payload capacity of launch vehicles due to the use of lighter fuel.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

7. 'Debris-Free Space Missions (DFSM) Initiative', sometimes appeared in the news, was launched by:
- National Aeronautics and Space Administration (NASA)
 - China National Space Administration (CNSA)
 - European Space Agency (ESA)
 - Indian Space Research Organisation (ISRO)
8. With reference to the Vitiligo, consider the following statements:
- It is an autoimmune disorder where the body's immune system attacks pigment-producing cells (melanocytes).
 - In rare cases, it's possible for vitiligo to affect the whole body. This is known as universal vitiligo.
- Which of the statements given above is/are correct?
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
9. Which one of the following is the context in which the term "superposition, entanglement, and interference" is mentioned?
- Quantum Mechanics
 - Classical Thermodynamics
 - General Relativity
 - Cloud Services
10. Which of the following statements about hydrogen peroxide (H_2O_2) is correct?
- It is a colorless liquid with strong oxidizing properties and is widely used in disinfection and paper bleaching.
 - It is a colored liquid with reducing properties, primarily used as a fuel additive and lubricant.
 - It is a solid compound that acts as a weak oxidizing agent, mainly used in food preservation.
 - It is a gas used predominantly in the production of plastics and has no known industrial applications.
11. Which of the following is NOT a benefit of Hydrogen Fuel Cells?
- Zero greenhouse gas emissions
 - High energy efficiency
 - Immediate large-scale deployment without infrastructure changes
 - Renewable and sustainable fuel source
12. Consider the following statements regarding Hantavirus:
- It is primarily transmitted to humans through inhalation of virus particles from rodent droppings or saliva.
 - There is no specific antiviral treatment or cure for hantavirus infection.
- Which of the above statements is/are correct?
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
13. Which enzyme is produced as a result of ethylene activation in bananas?
- Amylase
 - Polyphenol oxidase
 - Lipase
 - Protease

- 14.** With reference to the Chandra's Surface Thermophysical Experiment (ChaSTE), consider the following statements:
1. It is a thermometer aboard Chandrayaan 1 and performs on-site temperature measurements of the Moon's surface.
 2. It highlighted the extreme non-conductivity of the Moon's surface.
- 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
- 15.** Consider the following investigative techniques used in forensic psychology:
1. Polygraph Test
 2. Narco-Analysis Test
 3. Brain Electrical Oscillation Signature (BEOS) Profiling
- Which of the above require the consent of the accused before being conducted?
- (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 about Starlink:
1. It is a satellite-based internet service operated by Amazon.
 2. It aims to deploy a constellation of satellites in low Earth orbit.
 3. Starlink services require underground fibre-optic cables for connectivity.
- 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
- 17.** Thalassemia, recently seen in the news, is mainly a:
- (a) Neurological disorder affecting muscle movement.
 - (b) Genetic blood disorder affecting hemoglobin production.
 - (c) Viral disease causing severe lung infection.
 - (d) Bacterial infection leading to skin rashes.
- 18.** Recently, the term 'Birefringence' was in the news. It is primarily related to:
- (a) Quantum computing advancements
 - (b) Satellite communication technology
 - (c) Optical properties of materials
 - (d) Artificial intelligence algorithms
- 19.** In the context of quantum mechanics, which of the following best describes supersolid light?
- (a) A phase of light that exhibits properties of both a solid and a superfluid simultaneously.
 - (b) A high-energy state of photons in thermal equilibrium with their surroundings.
 - (c) A type of quantum computer architecture using superconducting materials.
 - (d) A new form of Bose-Einstein Condensate (BEC) created in a vacuum chamber.
- 20.** With reference to the Genetically Modified (GM) Crops, consider the following statements:
1. Crops that have undergone genetic engineering processes to alter their DNA are referred to as genetically modified crops.
 2. BT Cotton and BT Brinjal are the two GM crops that are allowed to be commercially cultivated in India.

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. With reference to the Extraction of Hydrogen, consider the following statements:

1. Green hydrogen is produced using renewable energy sources through electrolysis—splitting water into hydrogen (H₂) and oxygen (O₂).
2. Blue hydrogen is produced from natural gas using steam methane reforming (SMR).

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:

1. India has the highest Tuberculosis (TB) burden in the world.
2. India's goal is to eliminate tuberculosis (TB) by 2025, five years ahead of the global target of 2030.

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. 'RNA interference (RNAi)' technology has gained popularity in the last few years. Why?

1. It is used in developing gene silencing therapies.
2. It can be used in developing therapies for the treatment of cancer.
3. It can be used to develop hormone replacement therapies.
4. It can be used to produce crop plants that are resistant to viral pathogens.

Select the correct answer using the code given below.

- (a) Only one (b) Only two
(c) Only three (d) All of the above

24. Which of the following statements accurately describes the concept of "AI Washing"?

- (a) It refers to the process of integrating artificial intelligence into existing systems to improve performance.
- (b) It is the marketing strategy that involves the overuse or misuse of the term "AI" to make a product seem more advanced or intelligent than it actually is.
- (c) It refers to the ethical guidelines to ensure AI is developed and deployed in a way that benefits society.
- (d) It is the process of cleaning and processing AI models by removing unnecessary biases and improving their efficiency.

25. With reference to NavIC (Navigation with Indian Constellation), consider the following statements:

1. NavIC consists of a constellation of 9 satellites, all placed in geostationary orbit.
2. It provides two types of services: Standard Positioning Service (SPS) for civilian users and Restricted Service for strategic users.
3. The coverage area of NavIC extends beyond India, up to 1500 km from its boundary.
4. NavIC signals are not interoperable with other global navigation satellite systems.

Which of the statements given above are correct?

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

EXPLANATIONS

1. (b)

Context

- Amazon Web Services (AWS) has unveiled 'Ocelot', its first prototype quantum computing chip with claims of reducing error correction costs by up to 90 per cent.

Ocelot chip

- The Ocelot chip features a **two-layer integrated silicon design**, with each microchip occupying roughly one square centimeter. Key components include:
 - Five data qubits (Cat qubits):** These store the quantum states necessary for computation.
 - Five buffer circuits:** Designed to stabilize the data qubits.
 - Four additional qubits:** Responsible for detecting errors in the data qubits.
 - Oscillators made from Tantalum:** This superconducting material enhances performance and stability.

2. (b)

Ultra-conserved elements (UCEs) are stretches of Deoxyribonucleic acid (DNA) that are at least 200 base pairs long and exhibit 100% sequence identity across different species.

- In humans, 481 such elements have been identified, with some extending up to 781 base pairs.
- These elements are found on all human chromosomes except for 21 and Y.
- Key functions** of UCEs are **Gene Regulation, Developmental Processes, and Evolutionary Stability**.

3. (c)

Context

- Scientists have created a new gene therapy for a debilitating genetic disorder called maple syrup urine disease (MSUD).

Maple Syrup Urine Disease (MSUD)

- MSUD is a rare genetic disorder characterized by deficiency of an enzyme complex, **Branched-Chain Alpha-Keto Acid Dehydrogenase (BCKDH)**.
 - This complex is crucial for breaking down branched-chain amino acids—**leucine, isoleucine, and valine**.
- The absence or malfunction of this complex leads to the accumulation of toxic metabolites, resulting in severe **neurological damage** and, in extreme cases, death.

4. (b)

Statement 1 is not correct: The Euclid mission is the primary collaboration between ESA and NASA, with no significant involvement from the Indian Space Research Organization (ISRO) in this specific mission.

Statement 2 is correct: Mission: To explore the **composition and evolution of the dark Universe**.

- Objective:** Create a map of the Universe's large-scale structure across space and time.
 - Observing billions of galaxies up to 10 billion light-years away, covering over a third of the sky.

- **Focus Areas:** Investigating the expansion of the Universe, structure formation, and the roles of gravity, dark energy, and dark matter.

5. (b)

In News: Recent research published in the journal **Nature Communications**, suggests that the **primary reason for Mars' red color** is the presence of **ferrihydrite**, a water-rich iron mineral.

- **Ferrihydrite** typically forms in the presence of cool water, indicating that Mars may have had a wetter and potentially more habitable past than previously thought.

6. (b)

Statement 1 is not correct: Semi-cryogenic Engine

- **Propellants:** **Liquid oxygen (LOX)** and kerosene, making them **safer and less toxic** than cryogenic engines using liquid hydrogen.
- **Thrust:** Offer enhanced thrust of **2,000 kiloNewtons (kN)**.

Statement 2 is correct: Payload Capacity: Semi-cryogenic engines **increase payload capacity of launch vehicles** due to the use of **lighter fuel (kerosene)**.

Difference between Cryogenic and Semi-cryogenic Engine

Feature	Cryogenic Engine	Semi-Cryogenic Engine
Propellants	Liquid Oxygen (LOX) and Liquid Hydrogen (LH2).	Liquid Oxygen (LOX) and Kerosene.
Storage Temperature	LH2 requires -253°C storage.	Kerosene can be stored at normal temperatures.
Thrust	Higher specific impulse, less dense.	Higher density impulse, more thrust per volume.
Complexity	More complex to handle and store.	Easier to handle and store.
Reusability	Lower reusability potential	Higher reusability potential due to simpler components.

7. (d)

In News: With thousands of satellites in orbit and record numbers of rocket launches, the risk of space debris crashing to Earth is growing.

- **Debris-Free Space Missions (DFSMS) Initiative by ISRO:** It aims to achieve debris-free space missions by all Indian space actors, both governmental and non-governmental, **by 2030**. The initiative focuses on:
 - Avoiding Debris Generation;
 - Collision Avoidance;
 - Post-Mission Disposal.

8. (c)

- **Both the statements are correct: Vitiligo** is a **chronic autoimmune disorder** where the body's immune system attacks pigment-producing cells (melanocytes), **causing white patches on the skin**.
 - It can occur anywhere on the body, including the face, hands, and other exposed areas.
 - While the condition is mostly cosmetic, it can cause emotional distress.
- There are 2 main types of vitiligo:
 - **Non-segmental vitiligo** - Often appear on both sides of your body as symmetrical white patches.

- **Segmental vitiligo** - Only affects one area of your body.
- **In rare cases**, it's possible for vitiligo to affect the whole body. This is known as **universal vitiligo**.
- **Treatment options include** creams, light therapy, and sometimes surgery to help manage symptoms.

9. (a)

Context

- NITI Aayog's Frontier Tech Hub (NITI-FTH) highlights the potential of quantum computing for economic growth and national security and global competitiveness.

What is Quantum Technology?

- Quantum technology is a rapidly advancing field that leverages the principles of quantum mechanics to develop new technologies with unprecedented capabilities.
 - Quantum mechanics is the branch of physics that studies the behavior of particles at the quantum level, where classical physics no longer applies.
- Quantum computing uses 'qubit' (or quantum bit) as its fundamental unit.
- This technology exploits the principles of quantum mechanics, which include superposition, quantum entanglement, and interference.
 - Superposition refers to the ability of these particles to exist in multiple locations simultaneously.

10. (a)

In Context

- Researchers have discovered a sustainable and energy-efficient method to produce hydrogen peroxide using sunlight and covalent organic frameworks.

About Hydrogen Peroxide (H₂O₂)

- It is a **colorless liquid chemical** compound known for its strong **oxidizing properties**.
- It is widely used in disinfection, paper bleaching, **chemical synthesis, and fuel cells**.
- **Hydrogen peroxide** can cause irritation to the eyes, nose, skin, and throat. Workers may be harmed from exposure to hydrogen peroxide.

11. (c)

Context

- Recently the hydrogen-powered fuel cells have been successfully demonstrated as a reliable backup power solution for telecom towers.

Hydrogen Fuel cells

- Hydrogen fuel cells produce electricity by combining **hydrogen and oxygen** atoms.
- A fuel cell consists of an **anode** (negative electrode) and **cathode** (positive electrode) sandwiched around an electrolyte.
 - Hydrogen is fed to the anode and air is fed to the cathode.
- **Hydrogen infrastructure** (production, storage, and distribution) is still under development, making large-scale deployment challenging.

Advantages of Hydrogen Fuel Cell

- **Zero Emissions:** Hydrogen fuel cells produce electricity with the only byproduct being water vapor. This makes them a zero-emission source of energy, contributing to cleaner air and combating climate change.

- **High Efficiency:** Hydrogen fuel cells have high energy efficiency compared to internal combustion engines. They can convert fuel into electricity with efficiencies higher than 50%.

12. (c)

In Context

- According to the U.S. Centers for Disease Control and Prevention (CDC), **hantaviruses** are a family of viruses that can cause severe, potentially fatal illnesses.

What is Hantavirus?

- A family of viruses that cause **severe respiratory and renal illnesses**.
- It causes **Hantavirus Pulmonary Syndrome (HPS)**, which starts with flu-like symptoms such as fever, chills, and muscle aches. In severe cases, it leads to respiratory distress, fluid buildup in the lungs, and can be fatal.

How Does Hantavirus Occur?

- Carried by rodents (deer mice, rice rats, white-footed mice, cotton rats).
- **Transmission methods:** Inhalation of virus particles from **rodent droppings, or saliva**.
 - Touching contaminated materials and then the eyes, nose, or mouth.

Treatment & Prevention

- No specific antiviral treatment or cure.

13. (b)

In News: Recently, a UK-based biotech company developed genetically-engineered bananas that have a **longer shelf-life** and **do not brown** as much.

- Bananas undergo a ripening process triggered by ethylene, a hormone they produce in large quantities.
- **Ethylene** activates genes that produce **polyphenol oxidase (PPO)**, an enzyme that causes browning by breaking down the yellow pigment in bananas.
- Bruising increases ethylene production, speeding up ripening and browning.
- Scientists **genetically modified bananas** by silencing the gene that produces PPO, preventing browning.
- This genetic modification does not stop ripening but keeps the fruit looking fresh longer.

14. (b)

Statement 1 is not correct: No, Chandra's Surface Thermophysical Experiment (ChaSTE) is **not** aboard Chandrayaan-1.

- It is actually an instrument on the Vikram lander of the Chandrayaan-3 mission designed to measure the thermal properties of the lunar surface at high latitudes.

Statement 2 is correct: It revealed a significant temperature difference of **nearly 60°C between the Moon's surface and a layer just 10 cm beneath it**, highlighting the **extreme non-conductivity of the Moon's surface**.

15. (d)

The Supreme Court of India has ruled that all these tests—Polygraph, Narco-Analysis, and BEOS—require the consent of the accused before being conducted, as forcing them would violate fundamental rights under Articles 20(3) and 21 of the Constitution.

Context

- Five of the six accused arrested in connection with the Parliament security breach consented to a polygraph test.

What is the Polygraph Test?

- The Polygraph Test is commonly known as a **lie detector test**.
- It is based on the assumption that **physiological responses** (heartbeat, changes in breathing, sweating, etc.) triggered when a person is lying are different from what they would be otherwise.
- **Instruments** like cardio-cuffs or sensitive electrodes are attached to the person, and variables such as blood pressure, pulse, blood flow, etc., are measured as questions are put to them.
- A **numerical value is assigned** to each response to conclude whether the person is telling the truth, is deceiving, or is uncertain.

Are the results of the tests admissible as evidence?

- In '**Selvi & Ors vs State of Karnataka & Anr**' (2010) the Supreme Court said, that the results of the tests cannot be considered to be "**confessions**".
- However, any information or material subsequently discovered with the help of such a voluntarily-taken test can be admitted as evidence.

16. (b)

Statement 1 is not correct: Starlink is a satellite-based internet service operated by SpaceX, not Amazon. Amazon's satellite internet project is called Project Kuiper, which is separate from Starlink.

Statement 2 is correct: Starlink aims to deploy a constellation of satellites in low Earth orbit (LEO) to provide high-speed internet worldwide. These satellites are placed at an altitude of around 550 km to offer low-latency broadband internet.

Statement 3 is not correct: Starlink does not require underground fiber-optic cables for connectivity. Instead, it uses satellite terminals (dish antennas) that communicate directly with Starlink satellites in space. Fiber-optic cables are used in terrestrial broadband networks, but Starlink works independently using wireless space-based communication.

17. (b)**Context:**

The Andhra Pradesh government is considering increasing the ₹10,000 monthly pension for thalassemia patients and extending it to those above the poverty line, given the high cost of treatment.

What is Thalassemia?

- Thalassemia is an **inherited blood disorder** (passed from parents to children through genes) where the body cannot produce enough **hemoglobin**, the protein in red blood cells (RBCs) that carries oxygen.
- Each red blood cell contains 240 to 300 million hemoglobin molecules, and a deficiency leads to **severe anemia**, requiring **blood transfusions every 2-3 weeks** for survival.
- **Symptoms of Thalassemia:** Apart from anemia, patients may experience: weak bones, delayed or slow growth, Iron overload (due to frequent transfusions), poor appetite, enlarged spleen or liver, and pale skin.

18. (c)**Context:**

A study reveals that Birefringent materials are used in LCD screens, medical microscopes, optical switches, waveplates, frequency converters, and high-power lasers.

About Birefringence (aka double refraction)

- It is an optical phenomenon where a material splits a single light ray into two distinct rays, each traveling at different speeds and refracting in different directions.

- It arises due to the anisotropic nature of certain materials, meaning their optical properties vary depending on the direction of light propagation.

19. (a)

Supersolidity: A supersolid is a state of matter that displays both crystalline order (like a solid) and superfluidity (the ability to flow without viscosity).

Supersolid Light: In the context of light, this refers to situations where photons exhibit these dual properties. This is achieved through specific quantum manipulations that create a state with both a periodic density modulation (like a solid) and the ability to flow without dissipation (like a superfluid).

20. (a)

Statement 1 is correct: Crops that have undergone **genetic engineering processes** to alter their DNA are referred to as genetically modified crops.

- This alteration is done **to introduce desirable traits** such as resistance to pests or herbicides, improved nutritional content, or increased yield.
- **The process of creating GM crops typically involves:** identification of desired traits, isolation of genes, insertion into crop genome, and expression of the trait.
- **The techniques used in GM crops are:** gene guns, electroporation, microinjection, agrobacterium etc.

Statement 2 is not correct: Bt Cotton: In 2002, the GEAC had allowed the commercial release of Bt cotton.

- Bt cotton has two alien genes from the soil bacterium *Bacillus thuringiensis* (Bt) that allows the crop to develop a protein toxic to the common pest **pink bollworm**.
- Till now, it is the only GM crop that is allowed in India.
- Many varieties of GM crops are under different stages of development, like **Bt brinjal** and **DMH-11 mustard**.

21. (a)

Statement 1 is correct: Hydrogen exists in combination with other elements, so it must be extracted from **naturally occurring compounds like water (H₂O)**.

- **Green hydrogen** is produced using **renewable energy sources** (wind, solar, hydropower) **through electrolysis**—splitting water into **hydrogen (H₂) and oxygen (O₂)**.
- When the electricity for electrolysis comes from renewable sources, the hydrogen produced is green.

Statement 2 is not correct: Grey hydrogen is produced from natural gas using **steam methane reforming (SMR)**, releasing CO₂ and contributing to greenhouse gas emissions.

- **Blue hydrogen** involves **capturing and storing CO₂ emissions** from hydrogen production using natural gas.

22. (c)

Both the statements are correct: TB as a global health challenge: India has the **highest TB burden in the world**, contributing to **26% of the global burden and 29% of global TB-related deaths**.

- India is followed by **Indonesia (10%), China (6.8%), the Philippines (6.8%), and Pakistan (6.3%)**.
- **Multidrug-Resistant TB:** India represents 27% of the world's multi-drug-resistant TB cases, underscoring the need for specialized treatment approaches.
- The World Health Organization (WHO) has recognised India's progress, with a **17.7% decline in TB incidence from 2015 to 2023**, a rate more than double the global decline of **8.3%**.
- India's goal is to **eliminate tuberculosis (TB) by 2025**, five years ahead of the **global target of 2030**.

23. (c)

Statement 1 is correct: RNAi works by silencing specific gene expressions using small RNA molecules (siRNA, miRNA).

Statement 2 is correct: RNAi is being researched to silence oncogenes or genes involved in cancer progression.

Statement 3 is not correct: RNAi is not used to replace hormones. Hormone replacement involves providing deficient hormones (e.g., insulin, estrogen), not silencing genes.

Statement 4 is correct: RNAi is used in agriculture to create virus-resistant crops by silencing viral genes (e.g., Papaya ringspot virus resistance).

24. (b)

AI washing is a **term derived from greenwashing**, where companies exaggerate their environmental friendliness to appeal to customers.

- Similarly, businesses that claim to have integrated AI into their products, when they're **actually using less sophisticated technology**, can be accused of AI washing.
- When it comes to AI washing, there are several types.
 - Some companies claim to use AI when they're actually using less-sophisticated computing, while others overstate the efficacy of their AI over existing techniques, or suggest that their AI solutions are fully operational when they are not.
- **Concerns:** AI washing can have concerning impacts for businesses, from overpaying for technology and services to failing to meet operational objectives the AI was expected to help them achieve.
 - For investors it can make it harder to identify genuinely innovative companies.

25. (b)

Statement 1 is not correct: NavIC consists of 7 satellites and 3 in geostationary and 4 in inclined geosynchronous orbit.

Statement 2 is correct: It provides Standard Positioning Service (SPS) for civilians and Restricted Service for strategic users.

Statement 3 is correct: NavIC covers India and a region up to 1500 km beyond its borders.

Statement 4 is not correct: NavIC signals are interoperable with other GNSS systems like GPS, GLONASS, Galileo, and BeiDou.

■■■■

ENVIRONMENT & ECOLOGY

1. Consider the following statements about Giloy (*Tinospora cordifolia*):
 1. It is a native tropical plant of India known for its medicinal properties in Ayurveda.
 2. It contains bioactive compounds such as alkaloids, steroids, and glycosides.
 3. Giloy is primarily cultivated in coastal regions of India.Which of the above statements is/are correct?
 - (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2, and 3
2. Consider the following statements regarding the Gharial (*Gavialis gangeticus*):
 1. It is classified as Critically Endangered by the IUCN Red List.
 2. It is listed under Schedule II of the Wildlife (Protection) Act, 1972.
 3. All species of crocodile mainly prey on warm-blooded animals.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 and 3 only
 - (c) 1 and 2 only
 - (d) 1, 2, and 3
3. With reference to the National Board for Wildlife, consider the following statements:
 1. It was established in 2003 under the Wildlife (Protection) Act, 1972 (WLPA).
 2. Standing committee comprises Vice-Chairperson, and 10 nominated 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
4. With reference to the Indus River Dolphin (*Platanista minor*), consider the following statements:
 1. It is found exclusively in the Indus River system in Pakistan.
 2. It is listed as 'Endangered' on the IUCN Red List.
 3. It has been declared the State Aquatic Animal of Punjab.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
5. Which of the following is the Significance of Wallace Line in biogeography?
 - (a) It marks the boundary between tropical and temperate climate zones.
 - (b) It represents the division between terrestrial and marine ecosystems.
 - (c) It separates distinct faunal regions of Asia and Wallacea.
 - (d) It indicates the migration route of early humans.

6. Consider the following statements regarding Gum Arabic (Acacia Gum):
1. It is a natural gum obtained from the sap of Acacia trees.
 2. Sudan is the largest producer of Gum Arabic in the world.
 3. It is used exclusively in the food industry as a thickening agent.
 4. Gum Arabic has been classified as a critical agricultural commodity by the FAO.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only (b) 1, 2, and 4 only
(c) 3 and 4 only (d) 1, 2, 3, and 4
7. With reference to the Compensatory Afforestation Fund (CAF) Act, 2016, consider the following statements:
1. The Act provides for the establishment of both a National Compensatory Afforestation Fund and State Compensatory Afforestation Funds.
 2. The funds under CAMPA are lapsable and do not earn any interest.
 3. The primary objective of the Act is to compensate for forest land diverted for non-forest use.
- 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
8. Consider the following statements with reference to Loss and Damage Fund (LDF)
1. It was established at the UNFCCC Conference (COP27) in Spain.
 2. It aims to provide financial assistance to nations most vulnerable and impacted by the effects of 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
9. According to India's National Policy on Biofuels, which of the following can be used as raw materials for the production of biofuels?
1. Cassava
 2. Damaged wheat grains
 3. Groundnut seeds
 4. Horse gram
 5. Rotten potatoes
 6. Sugar beet
- Select the correct answer using the code given below:
- (a) 1, 2, 5 and 6 only (b) 2, 3, 4 and 5 only
(c) 1, 3, 4 and 6 only (d) 1, 2, 3, 4, 5 and 6
10. With reference to the Madhav National Park, consider the following statements:
1. It is located in Madhya Pradesh and has become the 58th Tiger Reserve of India.
 2. Madhav Sagar located within the park is a Ramsar Site.
- 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. Satkosia Tiger Reserve (STR), one of the four notified reserves in India that does not have a single tiger, was recently seen in the news. It is located in which of the following states?
- (a) Madhya Pradesh (b) Chhattisgarh
(c) Odisha (d) Jharkhand
12. With reference to Cassava (Yuca/Manioc), consider the following statements:
1. It is a drought-resistant root crop, native to Africa.
 2. The National Policy on Biofuels, 2018, allows cassava to be used as a raw material for ethanol production.
 3. Cassava is a rich source of proteins and essential amino acids.
- 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
13. With reference to World Air Quality Report 2024, which of the following statements is/are correct?
1. India is the second most polluted country in the world.
 2. Byrnihat, a city on the border of Assam-Meghalaya, emerged as the world's most polluted city.
- 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. Which of the following are considered major air pollutants?
1. Particulate Matter (PM)
 2. Nitrogen Dioxide (NO₂)
 3. Sulfur Dioxide (SO₂)
 4. Volatile Organic Compounds (VOCs)
- Select the correct answer using the code given below:
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1, 2, and 3 only (d) 1, 2, 3, and 4
15. Consider the following pairs
- | Vulture Species | IUCN Red List status |
|---------------------------|----------------------|
| 1. Eurasian Griffon | Endangered |
| 2. Slender-billed Vulture | Near Threatened |
| 3. Egyptian Vulture | Endangered |
- How many of the above pairs are correctly matched?
- (a) Only one (b) Only two
(c) All three (d) None
16. Kanger Valley National Park, recently seen in the news, is situated in which of the following states?
- (a) Chhattisgarh (b) Madhya Pradesh
(c) Jharkhand (d) Odisha

17. Consider the following statements:

1. Mangroves can survive under extreme hostile environments such as high salt and low oxygen conditions.
2. Mangrove seeds germinate while attached to the parent tree.
3. The Sundarbans in West Bengal is the largest mangrove region in the world and a UNESCO World Heritage Site.

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 |

18. With reference to the Great One-horned Rhinoceros, consider the following statements:

1. In India they are found in Assam only.
2. They are listed as endangered on the IUCN Red list of threatened species.

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 Caracal, consider the following statements:

1. In India they are now only found in parts of Rajasthan and Gujarat.
2. They are listed as least concern (LC) on the IUCN Red list of threatened species.

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 REDD+, consider the following statements:

1. It is a market-based mechanism under the Kyoto Protocol.
2. It allows developing countries to receive financial incentives for forest conservation efforts.
3. It was formalized under the Warsaw Framework in 2013.

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 |

21. Mukundra Hills Tiger Reserve is located in which of the following states of India?

- | | |
|--------------------|---------------|
| (a) Madhya Pradesh | (b) Karnataka |
| (c) Assam | (d) Rajasthan |

22. With reference to Anthurium, consider the following statements:

1. It is a tropical flowering plant native to South-East Asia.
2. Anthurium is listed by NASA among air-purifying plants due to its ability to remove harmful airborne chemicals.
3. Mizoram hosts an annual festival to promote the cultivation and ornamental value of Anthurium.
4. Anthurium is primarily cultivated in India in the states of Tamil Nadu and Kerala.

Which of the statements given above are correct?

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

23. With reference to *Sheathia rosemalayensis*, recently discovered in India, consider the following statements:
1. It is a species of freshwater algae discovered in the Eastern Ghats.
 2. It is only the second known species of the genus *Sheathia* to be reported from India.
 3. Algae, such as *Sheathia*, are non-photosynthetic organisms found only in marine environments.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only (b) 2 only
(c) 2 and 3 only (d) 1, 2 and 3
24. With reference to the 'Blue Flag Certification', consider the following statements:
1. It is awarded by the Foundation for Environmental Education (FEE), an international non-governmental organization.
 2. The certification is given only to beaches that are located in marine ecosystems.
 3. India has no beaches that have received the Blue Flag certification as of now.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 and 3 only
(c) 1 and 2 only (d) 1, 2 and 3
25. Consider the following statements regarding Black Carbon:
1. Black Carbon is a greenhouse gas that remains in the atmosphere for several years.
 2. It is a major component of PM_{2.5} and results from incomplete combustion of fossil fuels and biomass.
 3. India is the largest emitter of Black Carbon in the world.
- Which of the statements given above are correct?
- (a) 1 and 3 only
(b) 2 only
(c) 1 and 2 only
(d) 1, 3 and 3 only
26. Bhadra Wildlife Sanctuary recently seen in the news, is located in which of the following states?
- (a) Tamil Nadu (b) Madhya Pradesh
(c) Karnataka (d) Odisha

EXPLANATIONS

1. (a)

In News

- Research on Giloy (*Tinospora cordifolia*) has seen a dramatic 376.5% increase over the past decade, driven by a surge in interest post-COVID as experts explore its **immune-boosting, antiviral, and adaptogenic properties**.

Giloy

- Giloy (*Tinospora cordifolia*), a native **tropical plant of India**, is known for its medicinal properties in Ayurveda.
- It contains bioactive compounds such as alkaloids, steroids, and glycosides, found in its root, stem, and whole plant.
- Giloy is cultivated across plains, foothills, and semi-arid regions of India, especially in states like Bihar, West Bengal, Uttar Pradesh.

2. (a)

Statement 1 is correct: The Gharial (*Gavialis gangeticus*) is classified as Critically Endangered on the IUCN Red List due to drastic population declines caused by habitat destruction, depletion of fish prey, and illegal poaching.

Statement 2 is not correct: The Gharial is listed under Schedule I (not Schedule II) of the Wildlife (Protection) Act, 1972, which provides the highest level of legal protection in India.

Statement 3 is not correct: Unlike other crocodiles, the gharials feed on warm-blooded species and even the largest gharial adults feed exclusively on fish, which they catch between the pointed interlocking teeth of their long jaws. The young gharials prey primarily on small invertebrates such as insects, larvae and also small frogs.

3. (c)

Both the statements are correct:

National Board for Wildlife

- **Established:** 2003 under the Wildlife (Protection) Act, 1972 (WLPA).
- **Standing Committee Composition:**
 - **Vice-Chairperson:** Union Minister in charge of Forests & Wildlife
 - Member Secretary
 - Up to **10 members nominated by the Vice-Chairperson.**
- **Functions of the Standing Committee:** Meets quarterly to review and approve/reject wildlife-related proposals.
 - Decisions must align with the provisions of WLPA.
- Approval from NBWL is Required for:
 - Construction of tourist lodges.
 - Alteration of Protected Area (PA) boundaries.
 - Destruction/diversion of wildlife habitat.
 - De-notification of Tiger Reserves.

4. (b)

Indus River Dolphin (*Platanista minor*)

Characteristics:



- Functionally blind, navigates using echolocation.
- **Locally called *Bhulan*** in the region. Found mainly in the **Indus River System (Pakistan)** with a small population in **India's Beas River**.
- **Threats:** Habitat fragmentation, Restricted range, leading to population isolation.
- Conservation Status:
 - Indian Wildlife (Protection) Act, 1972: Schedule I
 - CITES: Appendix I
 - **IUCN Red List: *Endangered***
- State Recognition:
 - **Declared the *State Aquatic Animal of Punjab*.**

5. (c)

Context

- The Wallace Line is a crucial concept in biogeography, explaining the striking differences in species distribution across continents.

What is the Wallace line?

- The Wallace Line, first identified by British naturalist **Alfred Russel Wallace** in the late 19th century, is an **imaginary boundary** that separates the distinct biogeographic regions of **Asia and Wallacea** (a transitional zone between Asia and Australia).
- On the **western side** of the line, species are primarily of **Asiatic origin**, whereas on the **eastern side**, species exhibit **characteristics of both Asian and Australian** descent.
 - This stark contrast in fauna occurs despite the relatively short distances around (35 kilometers) between these regions.

Geographic extent of the Wallace Line

- It runs through the **Lombok Strait** between Bali and Lombok.
- It runs through the **Makassar Strait** between Borneo and Sulawesi.
- It extends eastward, south of **Mindanao Island**, into the **Philippine Sea**.

6. (b)

Statement 1 is correct: Gum Arabic is a natural exudate obtained from the bark of *Acacia senegal* and *Acacia seyal* trees. It is widely used due to its emulsifying, stabilizing, and film-forming properties.

Statement 2 is correct: Sudan is the world's largest producer of Gum Arabic, accounting for about 70-80% of global exports. Other major producers include Chad and Nigeria.

Statement 3 is not correct: While Gum Arabic is widely used in the food industry (e.g., soft drinks, confectionery, and baked goods), it also has non-food applications in pharmaceuticals, cosmetics, textiles, and printing.

Statement 4 is correct: The Food and Agriculture Organization (FAO) recognizes Gum Arabic as an important agricultural commodity due to its economic significance in African countries and its role in sustainable land management.

7. (b)

In News

- Recently, the Supreme Court of India sought a response from the Uttarakhand Chief Secretary regarding **allegations of misuse of Compensatory Afforestation Fund Management and Planning Authority (CAMPA) funds**.

CAMPA

- The Compensatory Afforestation Fund (CAF) Act, 2016, and its accompanying rules, notified in 2018.
- It aims to compensate for the loss of forest ecosystems due to forest land diversion for **non-forest use**.
- The Act establishes two special interest-bearing funds:
 - the **National Compensatory Afforestation Fund (National Fund)** managed by the Central Government through the National CAMPA, and
 - the **State Compensatory Afforestation Fund (State Fund)** managed by the respective State Governments/UT Administrations through State CAMPA.

Purpose

- The funds are used for compensatory afforestation, restoring degraded forests, improving wildlife habitats, and enriching biodiversity.
- The funds are **non-lapsable** and **earn interest** at a rate declared by the Central Government annually.

8. (b)

In News : The US has withdrawn from the board of the Loss and Damage Fund.

Statement 1 is not correct : **The Loss and Damage Fund (LDF)** was established at the 2022 UNFCCC Conference (COP27) in **Egypt** to provide financial support to regions suffering both economic and non-economic losses caused by climate change.

- These include extreme weather events and slow-onset processes, such as rising sea levels.
- The LDF is overseen by a Governing Board that determines how the Fund's resources are disbursed, with the World Bank serving as the interim trustee.

Statement 2 is correct : The purpose of the Fund is to assist developing countries that are particularly vulnerable to the adverse effects of climate change in responding to economic and non-economic loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events.

9. (a)

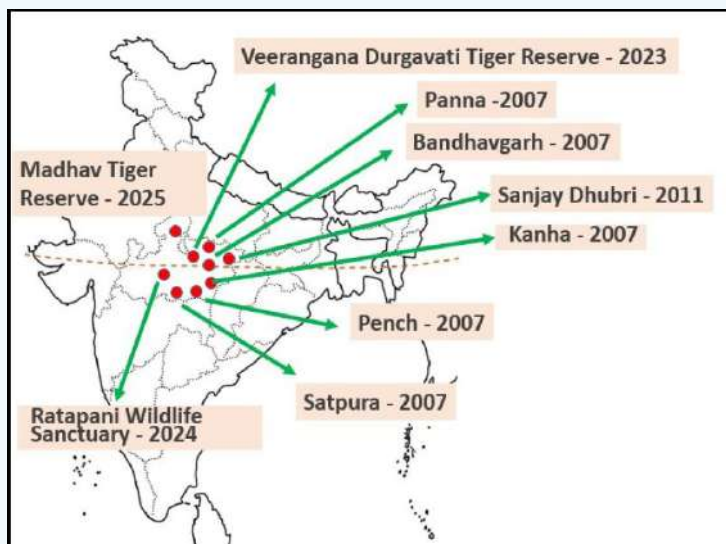
The National Policy on Biofuels (2018) allows the use of various **raw materials for biofuel production**. The policy categorizes biofuels into **Basic Biofuels (First Generation)** and **Advanced Biofuels (Second and Third Generation)**.

- Raw Materials Permitted for Biofuel Production:
 - **Sugar-based crops:** Sugarcane juice, sugar beet, sweet sorghum.
 - **Starchy crops:** Cassava, rotten potatoes, **damaged food grains like wheat**, maize, rice, and sorghum.
 - **Oilseeds & Non-Edible Oils:** Used cooking oil, non-edible oilseeds like Jatropha, Pongamia.
- Second Generation (2G) Biofuels:
 - **Agricultural waste:** Crop residues (straw, husks, bagasse, corn stover)
 - **Forestry waste:** Wood chips, Sawdust
 - **Municipal solid waste:** Organic fractions from garbage
 - **Non-edible oilseeds:** Jatropha, Pongamia
 - **Used cooking oil (UCO),** Animal fat
- Third Generation (3G) Biofuels:
 - **Microalgae & Cyanobacteria grown in ponds,** photobioreactors, or wastewater.
 - **Algae produce high amounts of lipids** and carbohydrates, convertible into biofuels.

10. (a)

Statement 1 is correct: The Centre declared the **Madhav National Park in Madhya Pradesh** as the country's **58th tiger reserve**.

- It has become the ninth tiger reserve in the state, **the highest in any state**.
- **Location:** It is situated near **Shivpuri town in Madhya Pradesh** and is a part of the **upper Vindhyan hills**.



Statement 2 is not correct: Lakes: Sakhya Sagar (Ramsar site, in 2022) and Madhav Sagar.

- Madhav Sagar is not a Ramsar Site.
- Rivers: Manier and Sind river.
- Ramsar sites refer to sites listed on the List of Wetlands of International Importance, also known as the Ramsar List.
- These sites are designated because they meet the Criteria for identifying Wetlands of International Importance.

11. (c)

Context:

- Recently, villagers around Satkosia Tiger Reserve of Odisha face the threat of displacement as the Forest Department pushes to reintroduce tigers.
 - Earlier, in 2018, efforts to reintroduce tigers failed in the same tiger reserve.

About Satkosia Tiger Reserve (STR)

- It is one of 58 tiger reserves managed by the National Tiger Conservation Authority (NTCA) in India.
 - It includes Satkosia Gorge (Mahanadi river) and Baisipali Sanctuaries.
- It has a unique biodiversity, with elements from the Deccan Peninsula and Eastern Ghats with some from the Western Ghats.
- In 2007, the State government census recorded 12 tigers in STR, but by 2018-19, only one remained.
 - However, according to the 2022 census, STR is one of four notified reserves in India that does not have a single tiger.

12. (b)

In News: Study has revealed that thousands of years of indigenous farming traditions have played a crucial role in maintaining the genetic diversity of cassava.

About Cassava (Also called 'Bread of the Tropics')

- Also known as 'Yuca' or 'Manioc', cassava is a root vegetable grown through stem cuttings.
- It is a tall semi-woody perennial shrub or tree native to South America and was introduced in Africa & Asia by Portuguese sailors. Hence, statement 1 is not correct.
 - Nigeria is the world's largest producer of Cassava.

- It has numerous health benefits as it is **rich in energy (carbohydrates) & vitamins, not of proteins**. Hence statement 3 is not correct.
- Under **India's National Policy on Biofuels (2018)**, cassava is recognized as a raw material for ethanol production, enhancing its significance beyond food security. Hence, statement 2 is correct.

13. (b)

Context

- According to the World Air Quality Report 2024, **thirteen** of the world's top 20 most polluted cities are in India, with Byrnihat on the Assam-Meghalaya border being the most polluted.

Key Findings of the report

- India is the **fifth most polluted country** in the world, with an average Air Quality Index (AQI) of **50.6 $\mu\text{g}/\text{m}^3$** – 10 times higher than the World Health Organization's (WHO) annual PM2.5 guideline value of **5 $\mu\text{g}/\text{m}^3$** .
 - In 2023, India was the third most polluted country.
- With an average PM 2.5 concentration of **91.8 $\mu\text{g}/\text{m}^3$** , Delhi continues to be the most polluted Capital city in the world
- Out of the 138 countries and regions, **126 (91.3%)** exceeded the WHO annual PM2.5 guideline value of 5 $\mu\text{g}/\text{m}^3$.
 - Only **17%** of global cities met WHO air pollution guidelines.
- PM2.5 concentrations decreased in every country in Southeast Asia, though **trans-boundary haze and lingering El Niño conditions** remain major factors.

14. (d)

Context

- According to the World Air Quality Report 2024, **thirteen** of the world's top 20 most polluted cities are in India, with Byrnihat on the Assam-Meghalaya border being the most polluted.

Air Pollution and Its Concerns

- When harmful substances (pollutants) – particles, gases, or matter – are released into the air and reduce its quality, the air is polluted.
- **Common air pollutants include:** Particulate Matter (PM), Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), Ozone (O₃), Carbon Monoxide (CO), Volatile Organic Compounds (VOCs), Lead etc.
- **Concerns:**
 - **Health Related:** Respiratory issues, cardiovascular problems, reduced lung function.
 - **Environmental:** Ecosystem damage, Biodiversity loss, Water pollution, climate change, crop damage.
 - **Healthcare Costs:** The health impacts of air pollution result in increased healthcare costs, including expenses related to the treatment of respiratory and cardiovascular diseases.

15. (a)

Recently, an **Indian long-billed vulture** was spotted with its chick at **Ramadevarabetta in Karnataka, India's only vulture sanctuary**.

Indian Long-billed Vulture (Gyps Indicus) is a medium-sized bird with pale brown body feathers, and a semi-bald head.

- Its **long bill and broad wings** are distinctive features.
- It primarily inhabits **cliffs, hilly crags, and open landscapes** in central and southern India.

Common Name	Scientific Name	Conservation Status
White-rumped Vulture	<i>Gyps bengalensis</i>	Critically Endangered
Red-headed Vulture	<i>Sarcogyps calvus</i>	Critically Endangered
Slender-billed Vulture	<i>Gyps tenuirostris</i>	Critically Endangered
Indian Vulture	<i>Gyps indicus</i>	Critically Endangered
Egyptian Vulture	<i>Neophron percnopterus</i>	Endangered
Cinereous Vulture	<i>Aegypius monachus</i>	Near Threatened
Lammergeyer/ Bearded Vulture	<i>Gypaetus barbatus</i>	Near Threatened
Himalayan Griffon	<i>Gyps himalayensis</i>	Near Threatened
Eurasian Griffon	<i>Gyps fulvus</i>	Least Concern

16. (a)

Context

- India has added 6 properties to its tentative list for UNESCO heritage status.

About

- India now has 62 sites on the tentative list and addition to the World Heritage Centre's tentative list is mandatory if a property is to be nominated for inscription to the World Heritage List in future.
- The six properties added to the tentative list include **Kanger Valley National Park** in Chhattisgarh; **Mudumal Megalithic Menhirs** in Telangana; **Ashokan Edict Sites** (spread across Bihar, Uttar Pradesh, Madhya Pradesh, Delhi, Karnataka, Andhra Pradesh, Gujarat); **Chausath Yogini Temples** (spread across Madhya Pradesh, Uttar Pradesh, Tamil Nadu, Odisha); **Gupta Temples** (spread across Madhya Pradesh, Uttar Pradesh, Rajasthan, Bihar), and the **palace-fortresses of the Bundelas** in Madhya Pradesh and Uttar Pradesh.
- At present, a total of 43 properties from India are inscribed on the UNESCO World Heritage List, including 35 in the 'Cultural' category, seven in 'Natural' and one in 'Mixed' category.

17. (d)

In News : Tamil Nadu's mangrove forest cover has nearly doubled from **4,500 ha in 2021 to 9,039 ha in 2024**, due to **new plantations** and **preservation of existing mangroves**.

Statements 1,2 and 3 are not correct : Mangroves are salt-tolerant plants found in **tropical and subtropical intertidal regions**, providing refuge for coastal biodiversity and acting as bio-shields against extreme climatic events.

- Mangroves absorb oxygen from the atmosphere through special roots called pneumatophores (breathing roots) that allow oxygen to reach underground tissues.
- Mangrove seeds germinate while attached to the parent tree, growing into propagules that drop into the water and are transported to new locations.
- They are adapted to thrive in coastal regions with brackish water and wet, loose soil.
- The Sundarbans in West Bengal is the largest mangrove region in the world and a UNESCO World Heritage Site. It spans from the Hooghly River in West Bengal to the Baleswar River in Bangladesh.

18. (d)

Statement 1 is not correct: The greater one-horned rhino (or "Indian rhino") is the **largest of the rhino species**.

- Habitat:** Grasslands and shrublands on the southern base of the Himalayas.

- **Distribution:** India, Pakistan, Bangladesh, Bhutan and Myanmar.
 - In India, they are found in **Assam, West Bengal and Uttar Pradesh.**

Statement 2 is not correct: Conservation Status:

- **IUCN Status: vulnerable.**
- **CITES:** Appendix I (I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances).

19. (c)

Both the statements are correct: Appearance: The Caracal is a primarily **nocturnal cat species** known for its distinct and pointy ears, which give the animal its name.

- **Distribution:** They are native to dozens of countries across **Africa, Middle East, Central Asia and South Asia.**
- **In India:** In recent years, the population of the wild cat has seen a sharp decline in Asia and is estimated to be **not more than 50 in India.**
 - They are now **only found in parts of Rajasthan and Gujarat.**
- **Threats:** Habitat loss and hunting by humans.
- **IUCN Status: Least Concern (LC).**
- **CITES:** It is protected by the Convention on International Trade in Endangered Species (CITES), under **appendices I and II.**

20. (b)

Statement 1 is not correct: REDD+ is not a market-based mechanism under the Kyoto Protocol. It is a non-market-based mechanism developed under the UNFCCC and associated with the Paris Agreement, not Kyoto.

Statement 2 is correct: REDD+ allows developing countries to receive results-based payments (financial incentives) for efforts in forest conservation and enhancement of forest carbon stocks.

Statement 3 is correct: The REDD+ mechanism was formalized under the Warsaw Framework for REDD+ in 2013, which outlines guidelines for implementation, monitoring, and safeguards.

21. (d)

Mukundra Hills Tiger Reserve is the **3rd tiger reserve in Rajasthan**, after Ranthambore & Sariska Tiger Reserves.

- Part of the Vindhyan range, extending from the Chambal River to Kalisindh.
- **It was declared a tiger reserve in 2013.**
- **Area Includes:** Mukundra National Park, Dara Sanctuary, Jawahar Sagar Sanctuary, and part of Chambal Sanctuary (from Garadia Mahadev to Jawahar Sagar Dam).

22. (b)

Statement 1 is not correct: Anthurium is native to tropical America, not South-East Asia.

Statement 2 is correct: NASA has included Anthurium in its list of air-purifying plants, as it helps remove pollutants like formaldehyde, ammonia, toluene, xylene, etc.

Statement 3 is correct: Mizoram celebrates the Anthurium Festival annually to promote its tourism and highlight the flower's ornamental value.

Statement 4 is not correct: While it may be cultivated in other states, Mizoram is particularly noted for its Anthurium cultivation in India.

23. (b)

Statement 1 is not correct: Sheathia rosemalayensis was discovered in Rosemala, located in the Western Ghats of Kerala, not the Eastern Ghats.

Statement 2 is correct: It is only the second reported species of the Sheathia genus in India, with the first found in the Himalayas. Sheathia species are extremely rare in India.

Statement 3 is not correct: Algae are photosynthetic organisms found in aquatic and moist environments, including both freshwater and marine habitats. Algae play a crucial role in ecosystems, producing oxygen and serving as the base of the aquatic food chain.

24. (a)

In News

- **Rushikonda Beach** in Visakhapatnam wins back the **Blue Flag tag**.
 - India currently has 13 beaches with **Blue Flag certification**.

About Blue Flag Tag

- The Blue Flag is an **international eco-label awarded to beaches, marinas, and sustainable boating tourism operators**.
- It is administered by the **Foundation for Environmental Education (FEE)**, headquartered in **Copenhagen, Denmark**.
- Recognized globally as a symbol of cleanliness, safety, and environmental sustainability.
- To earn the Blue Flag, a beach/marina must meet 33 strict criteria across four main categories:
 - Environmental Education and Information
 - Water Quality
 - Environmental Management
 - Safety and Services

25. (b)

Statement 1 is not correct: Black Carbon is not a greenhouse gas and Black Carbon is a Short-Lived Climate Pollutant (SLCP). It is short-lived, lasting only days to weeks in the atmosphere.

Statement 2 is correct: It is formed due to incomplete combustion and is a component of PM2.5.

Statement 3 is not correct: India is the second largest emitter after China.

26. (c)

Bhadra Wildlife Sanctuary is a prominent wildlife reserve located in the **Western Ghats of Karnataka**.

- It is part of the **larger Bhadra Tiger Reserve**, which was declared in **1998**.
- The sanctuary is named after the **Bhadra River**, which flows through it.
- It's also known as **Muthodi Wildlife Sanctuary**, located in Shivamogga and Chikmagalur districts.
- **Wildlife:** Home to over 250 bird species (many endemic), mammals, reptiles, and the Jagara Giant, the largest teak tree in Karnataka



MISCELLANEOUS

1. Consider the following statements regarding the Jnanpith Award:
 1. It honors the best literary work in any of the 22 languages recognized by the Constitution of India and in English (since 2013).
 2. It carries a citation, a gold replica of 'Vagdevi,' and a cash prize of ₹50 Lakh.Which of the statements given above is/are correct?
 - (a) Only 1
 - (b) Only 2
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
2. The '1985 Plaza Accord' recently seen in the news is related to:
 - (a) Gender reform policy
 - (b) Nuclear disarmament treaty
 - (c) Currency devaluation agreement
 - (d) Climate change mitigation plan
3. "Diyaslai," recently seen in the news, is the autobiography of which of the following?
 - (a) Amartya Sen
 - (b) Kailash Satyarthi
 - (c) Abhijit Banerjee
 - (d) Muhammad Yunus
4. The initiative AIKEYME, recently seen in the news, is related to:
 - (a) A space exploration program in collaboration with African countries.
 - (b) A defense cooperation agreement between India and ASEAN nations.
 - (c) A climate resilience initiative in the Indian Ocean Region.
 - (d) A multilateral maritime exercise between India and African nations.
5. Which one of the following international organizations publishes the 'World Social Protection Report (2024-26)'?
 - (a) International Labour Organization (ILO)
 - (b) United Nations Educational, Scientific and Cultural Organization (UNESCO)
 - (c) World Intellectual Property Organization (WIPO)
 - (d) Food and Agriculture Organization (FAO)
6. Signal app, recently seen in the news, is related to:
 - (a) A platform used by agencies to send data requests and takedown notices.
 - (b) An app providing network signals in remote areas.
 - (c) An encrypted messaging platform used by government officials.
 - (d) A financial transaction app for Bitcoin payments.
7. The Abel Prize, recently seen in the news, is awarded for outstanding contributions in:
 - (a) Literature
 - (b) Peace
 - (c) Physics
 - (d) Mathematics

8. Which one of the following organizations publish the Global Gender Gap Report?
- (a) World Bank
 - (b) World Economic Forum (WEF)
 - (c) UN Economic and Social Council (ECOSOC)
 - (d) Organisation for Economic Co-operation and Development (OECD)
9. The Bhore Committee, recently seen in the news, is related to:
- (a) Health reforms
 - (b) Agricultural reforms
 - (c) Educational reforms
 - (d) Industrial labour reforms
10. Recently, the 'Beijing Declaration and Platform for Action, 1995' was in the news. It is primarily related to:
- (a) Multi Dimensional Poverty
 - (b) Gender Equality
 - (c) Food Security & Inflation
 - (d) Global Health
11. The M N Venkatachaliah Commission (2000), recently seen in the news, is related to:
- (a) Electoral reforms
 - (b) Educational reforms
 - (c) Financial sector reforms
 - (d) Judicial reforms
12. 'Mission 300' recently seen in the news, is related to which of the following?
- (a) Space Mission by European Space Agency (ESA)
 - (b) Defence initiative for border security.
 - (c) Training 300 startups in deep-tech innovation.
 - (d) Electrification Initiative in Sub-Saharan Africa.
13. The Tarapore Committee is associated with which of the following?
- (a) Implementation of GST reforms
 - (b) Environmental impact of infrastructure projects
 - (c) Capital Account Convertibility in India
 - (d) Electoral reforms in India
14. The Havana Syndrome, suspected to be caused by directed sonic attacks, was first reported in which of the following countries?
- (a) United States
 - (b) China
 - (c) Russia
 - (d) Cuba
15. The report titled 'From Borrowers to Builders: Women's Role in India's Financial Growth Story', recently seen in the news, was released by which organization?
- (a) NITI Aayog
 - (b) World Economic Forum
 - (c) Reserve Bank of India (RBI)
 - (d) Ministry of Women and Child Development
16. Which of the following statements is correct regarding the Vantara initiative?
- (a) It is related to wildlife conservation and rehabilitation.
 - (b) It focuses on modernizing the agricultural sector.
 - (c) Its main objective is to prevent gender-biased sex-selective elimination.
 - (d) It represents a transformative approach to infrastructure development.
17. What is Ruellia Elegans, sometimes seen in the news?
- (a) An Invasive Species of plant
 - (b) A type of fungus
 - (c) Newly discovered Satellite
 - (d) a disease caused by virus

- 18.** With reference to the 'Golden Passport' Program', consider the following statements:
1. It enables individuals to obtain citizenship in exchange for financial contributions to a country's economy.
 2. It needs naturalization processes of three to six months.
- 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.** Which of the following historical events are responsible for the establishment of the International Women's Day?
- (a) French Revolution (b) Russian Revolution
(c) Cold War (d) None of the above
- 20.** The term TROPEX, recently seen in the news, refers to which of the following?
- (a) A diplomatic initiative to boost maritime trade between India and other countries.
(b) A maritime exercise conducted by the Indian Navy involving joint multi-service participation.
(c) A research project on oceanography led by Indian scientific institutions.
(d) A space exploration mission by the Indian Space Research Organisation (ISRO).
- 21.** Which among the following areas of governance uses the space technology:
1. Disaster management and response.
 2. Efficient land management.
 3. Environmental monitoring.
- Select the correct answer using the code given below:
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
- 22.** With reference to the Sustainable Development Goals (SDGs) consider the following statements:
1. The SDGs came into force from 2016.
 2. The goal 6 aims to achieve quality 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
- 23.** Which of the following was the primary purpose of Miller-Urey hypothesis?
- (a) To prove the theory of evolution by natural selection.
(b) To demonstrate that organic compounds are necessary for life.
(c) To demonstrate the process of photosynthesis in primitive organisms.
(d) To prove the role of meteorites in the formation of life.
- 24.** Consider the following pairs:
- | Committees | Related To |
|----------------------|-----------------------------|
| 1. Dinesh Goswami | Political Funding |
| 2. TS Krishnamoorthy | Internal Security |
| 3. Vohra Committee | Criminalization of Politics |
| 4. Indrajit Gupta | Security Market in India |

How many of the above pair(s) is / are correctly matched?

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

25. World's Largest White Hydrogen Deposit is found in which of the following countries recently?

- (a) United States (b) Australia
(c) Russia (d) France

26. With reference to the World Happiness Report 2025, consider the following statements:

1. Finland emerged as the 'happiest' country, followed by Denmark and Iceland.
2. India is ranked above Pakistan and Afghanistan in the report.

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

27. The terms Vikram 3201 and Kalpana 3201, recently seen in the news, are related to:

- (a) Locations on the Moon (b) High-Speed Microprocessors
(c) Next-Generation Submarines (d) Nuclear Power Plants

28. The Justice B.P. Jeevan Reddy Committee, recently seen in the news, was associated with which of the following issues?

- (a) Reviewing the Right to Information (RTI) Act
(b) Proposing changes in the Juvenile Justice Act
(c) Recommending reforms in the Armed Forces (Special Powers) Act (AFSPA), 1958
(d) Examining electoral reforms in India

29. Gurupadswamy Committee is related to which of the following?

- (a) Banking Reforms. (b) Prevention of Child Labour.
(c) Reservation for Women in Lok Sabha. (d) Conservation of Western Ghats.

30. Operation Brahma, recently launched by India, is associated with:

- (a) Evacuation of Indian nationals from conflict zones
(b) Humanitarian assistance to Myanmar after a major earthquake
(c) Naval deployment in the Indo-Pacific region
(d) Joint military exercises with ASEAN nations

31. With reference to the National Gene Bank (NGB) in India, consider the following statements:

1. It is managed by the Indian Council of Medical Research (ICMR).
2. It preserves only cultivated crop varieties for breeding and research.
3. It employs cryogenic and long-term seed storage technologies.

Which of the statements given above is/are correct?

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

EXPLANATIONS

1. (a)

In News

- Vinod Kumar Shukla, poet-writer from Raipur, was announced as the recipient of the 59th Jnanpith Award for 2024.

Jnanpith Award

- It is considered the highest literary award in India, given annually for the best creative literary output to writers in any of the 22 languages recognized by the Constitution of India and, from 2013, in the English language.
- The award idea was proposed by Rama Jain to select the best literary work in Indian languages.
- It carries a citation, a bronze replica of 'Vagdevi,' and a cash prize of ₹11 Lakh.

2. (c)

Context

- There is growing talk of a Mar-a-Lago Accord, drawing parallels to the 1985 Plaza Accord.
 - Mar-a-Lago is a resort in Florida, owned by the U.S. President Donald Trump.

1985 Plaza Accord

- Named after the **Plaza Hotel** in New York, the **Plaza Accord** was signed by the **USA** and **four other** major economies of the time: **Japan, Germany, France,** and the **UK**—the **G-5**.
 - The agreement aimed to **devalue the US dollar** by raising the exchange rates of the other currencies—namely, the **German Mark, Japanese Yen, British Pound,** and **French Franc**.
 - This was in response to the **US dollar reaching historic highs**, which was hurting US exports and pushing it towards **protectionist measures like tariffs**—a policy stance Donald Trump is now adopting—detrimental to all parties involved.
 - So the rest of the G5 decided to swallow a bitter pill in the short term in the hope that it will allow for free flow of trade in the longer term.

3. (b)

Context: The Indira Gandhi National Centre for the Arts (IGNCA), in collaboration with the Satyarthi Movement for Global Compassion, held a discussion on Diyaslai.

Diyaslai

- It is the autobiography of **Nobel Peace Prize laureate Kailash Satyarthi**.
- It chronicles Kailash Satyarthi's journey from a humble family in Vidisha to his lifelong fight for child rights, culminating in the Nobel Peace Prize.

Kailash Satyarthi

- Kailash Satyarthi, born (in 1954) in Vidisha, Madhya Pradesh.
- He has been a global advocate for social transformation, leading efforts to combat child slavery and exploitation across 140 countries.
- Over the past 44 years, he and his organization have rescued more than **138,000 children from child labour, slavery, and trafficking**, providing them with opportunities for education and a better future.

4. (d)

Context

- The Indian Navy is set to launch two **maiden initiatives—AIKEYME and IOS Sagar**—aimed at strengthening India's position as the **'Preferred Security Partner'** and **'First Responder'** in the Indian Ocean Region (IOR).

AIKEYME (Africa India Key Maritime Engagement)

- 'AIKEYME', which means 'Unity' in **Sanskrit**, is a large-scale multilateral maritime exercise with African nations.
- The first edition will be **co-hosted** by the **Indian Navy** and the Tanzania Peoples' Defence Force (TPDF).
 - It will take place **off the coast of Dar-es-Salaam, Tanzania**, over six days in mid-April 2025.
- Participating nations include **Comoros, Djibouti, Eritrea, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, and South Africa**, alongside the co-hosts.

Indian Ocean Ship (IOS) Sagar

- As part of this initiative, the **Indian Naval Ship (INS Sunayna)** will be deployed to the **Southwest IOR** with a combined crew from **India and nine Friendly Foreign Countries (FFCs)**.
 - Comoros, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Seychelles, Sri Lanka, and South Africa.

5. (a)

The **World Social Protection Report 2024-26**, published by the **International Labour Organization (ILO)**, provides a comprehensive overview of global progress in extending social protection since 2015.

- It emphasizes the critical role of universal social protection in addressing the climate crisis and facilitating a just transition to sustainable societies.
- According to the **World Social Protection Report 2024-26**, India's social security coverage has **doubled** from 24.4% in 2021 to 48.8% in 2024.
 - It underscores the success of the Ministry's data-driven approach.

6. (c)

Context

- Senior Trump administration officials used Signal, an encrypted messaging app, for military discussions and accidentally included a journalist, exposing sensitive information.

About Signal

- It is an app used for **direct messaging, group chats, and phone and video calls**.
 - It employs **end-to-end encryption** for both messaging and calling services, preventing **third parties** from viewing conversations or listening in on calls.
 - The app collects **minimal user data** and features **automated message deletion** after a set time, adding an extra layer of privacy.
- While Signal has gained popularity among government officials for **its privacy features**, the recent incident highlights the **potential risks of user errors** and raises questions about the appropriateness of using such apps for national security communication.

7. (d)

In News

- Japanese mathematician **Masaki Kashiwara** was awarded this **year's Abel Prize**.
- He was honored with the Abel Prize for his groundbreaking work in **algebraic analysis, representation theory, the development of D-modules**, and the discovery of crystal bases.

About Abel Prize

- Named after legendary **Norwegian mathematician Niels Henrik Abel (1802–1829)**, the prize was established by the **Norwegian Parliament in 2002** to commemorate the **200th anniversary of Abel's birth**.

- First awarded in 2003, the Abel Prize is often regarded as the **Nobel Prize equivalent in mathematics**.
- Recipients are selected by a committee appointed by the Academy, in consultation with the International Mathematical Union (IMU) and the European Mathematical Society (EMS).
- The award includes a cash award and a glass plaque designed by Norwegian artist Henrik Haugan.

8. (b)

Global Gender Gap Report is published by the **World Economic Forum (WEF)** benchmarking the current state and evolution of gender parity across four key dimensions, i.e. **Economic Participation and Opportunity; Educational Attainment; Health and Survival, and Political Empowerment**.

- It highlighted that countries like the United States, the United Kingdom, and Canada have made progress in promoting female judges, but **gaps persist, particularly at the highest levels**.

9. (a)

Context

- The Union Health Minister J.P. Nadda, while addressing the Rajya Sabha, highlighted the **government's policy shift towards a comprehensive and inclusive healthcare model under the National Health Policy 2017**.

About

- India's healthcare system has evolved from a **curative approach (post-disease treatment)** to a preventive and **holistic approach (early detection and wellness promotion)**.
- Key Milestones in Healthcare Development:
 - 1946 – Bhore Committee recommends universal healthcare.
 - 1983 – First National Health Policy (NHP) prioritizes primary health.
 - 2005 – National Rural Health Mission (NRHM) launched.
 - 2017 – National Health Policy (NHP) shifts focus from curative to preventive healthcare.
 - 2018 – Ayushman Bharat launched, marking a paradigm shift.

10. (b)

In News: Nearly **three decades** after the adoption of **Beijing Declaration and Platform for Action (1995)**, the struggle for women's rights in India remains complex and multifaceted.

- **The Beijing Declaration and Platform for Action** was adopted at the **Fourth World Conference on Women in 1995**, to provide a **comprehensive framework for gender equality**.
- It identified **12 critical areas of concern**, including poverty, education, health, violence against women, and women's participation in power and decision-making.
- It emphasized women's rights as human rights, advocating for reforms in education, political participation, economic empowerment, health, and protection from violence.

11. (d)

In News:

Vice President Jagdeep Dhankhar chaired a meeting with Rajya Sabha floor leaders to discuss the recovery of semi-burnt Indian currency notes from the residence of Delhi High Court Judge Justice Yashwant Verma.

About: Collegium System

- The Collegium is the system through which judges of India's higher judiciary (Supreme Court and High Courts) are appointed and transferred.

- It is **not based on the Constitution** or any specific law but has evolved through Supreme Court judgments, known as the “**Judges Cases.**”

Do you know?

- The Justice **M N Venkatachaliah Commission (2000)** recommended replacing the Collegium with a National Judicial Appointments Commission (NJAC).
- The NJAC was to include the CJI, two seniormost Supreme Court judges, the Union Law Minister, and an eminent person chosen by the President in consultation with the CJI.
- The government passed the NJAC Bill in 2014, but the Supreme Court struck it down as unconstitutional within a year, emphasizing the need to preserve the primacy of the judiciary in judicial appointments.

12. (d)

In 2024, the **World Bank Group and the African Development Bank** together launched Mission 300.

- **Mission 300:** Aims to connect 300 million people to electricity in Sub-Saharan Africa by 2030.
 - The ambitious initiative builds on years of groundwork, much of it led by the **Energy Sector Management Assistance Program (ESMAP).**
- **Goal:** Accelerate electrification while ensuring cleaner, diversified energy sources, economic growth, and job creation.
- **Current Challenge:** Nearly 600 million people in Sub-Saharan Africa lack electricity, making up **83% of the global unelectrified population.**
- Key Focus Areas:
 - Investment in generation, transmission, distribution, and regional interconnection.
 - Sector reform to ensure reliable, affordable, and quality power.

13. (c)

Context

- The Chairman of the 16th Finance Commission, Arvind Panagariya, said that India should not rush into full **capital account convertibility** at its current per capita income level.

Tarapore Committee Recommendations

- The Tarapore committee was set up by the **Reserve Bank of India** in **1997**.
- The committee in its report detailed certain preconditions for moving towards full CAC. These include:
 - **Fiscal consolidation:** Maintain fiscal deficit around **3-3.5% of GDP** for macroeconomic stability.
 - **Monetary Policy Objectives:** Align inflation rates to global levels and ensure interest rates reflect inflation differentials.
 - **Institutional Strengthening:** Enhance monetary policy framework for better decision-making.
 - **Banking System Reforms:** Strengthen banks through restructuring, safeguards, and capacity-building for liberalized capital flows.
 - **Adequacy of reserves:** With implementation of full CAC, adequacy of reserves would be an important parameter in gauging an economy's ability to absorb external shocks.

14. (d)

The Havana Syndrome refers to a set of unexplained neurological symptoms first reported by U.S. diplomats and intelligence officers in Havana, Cuba, in 2016. Over the years, similar cases have been reported in China, Russia, India, and other countries. Symptoms included headaches, dizziness, nausea, and cognitive impairment. Some researchers believe high-frequency sonic weapons could have been used to induce symptoms. Sonic weapons emit high-intensity sound waves in different frequency ranges. They are used for riot control, naval defense, and psychological warfare.

15. (a)

Context

- Recently **NITI Aayog** launched the report titled “From Borrowers to Builders: Women’s Role in India’s Financial Growth Story.”
 - The report sheds light on the role of women entrepreneurs in shaping India’s economic landscape.

Key Findings

- Steady Rise in Women Borrowers:** Women seeking credit grew three times between 2019 and 2024, reflecting increased demand among female borrowers.
- Women Borrower Demographics:** About 60% of women borrowers availing credit are from semi-urban or rural areas.
- Credit Supply Trends:** Women’s participation in credit origination has seen notable growth in recent years. Since 2019, the share of Women in Business Loans and Gold Loans has increased by **14% and 6%** respectively.
- Rise in Credit Monitoring and Awareness:** As of December 2024, **27 million** women borrowers in India have monitored their credit information report and score with CIBIL.

16. (a)

In News : Prime Minister Narendra Modi inaugurated Vantara.

Vantara is a **unique wildlife conservation, rescue, and rehabilitation initiative in Jamnagar, Gujarat.**

- It is home to over 1.5 lakh rescued, endangered, and threatened animals, offering them a home away from home and a second chance at life.

17. (a)

Context

- A recent study has raised concerns about the threat posed by **Ruellia Elegans**, to the native biodiversity of Assam.

About

- Ruellia Elegans**, commonly known as the **Brazilian petunia, Christmas pride, and wild petunia**, is a flowering plant native to wet tropical biomes.
 - The species derives its name from its elegant appearance.
- It is **native to Brazil** with bright **red trumpet shaped flowers**.
- It belongs to the **Acanthoideae sub-family** and is one of the four **invasive Ruellia species in India**, alongside **Ruellia ciliatiflora, Ruellia simplex, and Ruellia tuberosa**.

18. (a)

In News: Former IPL chief Lalit Modi has surrendered his Indian passport and acquired citizenship in Vanuatu which offers a ‘golden passport’ program.

Statement 1 is correct:

- ‘Citizenship by Investment or ‘Golden Passport’ Program’ enables individuals to obtain citizenship in exchange for financial contributions to a country’s economy.
- The cost of citizenship ranges from \$135,500 to \$155,500, with options for a family of four.
- These contributions can take various forms, such as investments in real estate, government bonds, or national development funds.

Statement 2 is not correct:

- **Unlike traditional naturalization processes**, Citizenship by Investment programs often have expedited timelines, allowing applicants **to secure citizenship within months**.

19. (b)

Every Year International Women’s Day is celebrated on the **8th March**.

- **Vladimir Lenin** declared March 8 as International Women’s Day in **1922** to recognise the **women’s role in the 1917 Russian Revolution**.
- It was officially recognized by the **United Nations in 1977**.

20. (b)**Context**

- TROPES 25 is conducted over a period of three months from **January to March 25**.

About

- It is the largest **biennial maritime exercise** organized by the Indian Navy, featuring substantial participation from Indian Army, Indian Air Force, and Coast Guard assets.
- It is executed in multiple phases—both in Harbour and at Sea—integrating various facets of combat operations, including cyber and electronic warfare, live weapon firings during the Joint Work Up Phase, and the Amphibious Exercise (AMPHEX).

21. (d)

All the statements are correct: Disaster Management and Response: National Remote Sensing Centre (NRSC) provides satellite data that helps in identifying **flood-affected areas, mapping damage, and planning rehabilitation**.

- **Efficient Land Management:** Initiatives like “**Swamitva Yojana**” use satellite mapping for land record management.
 - This initiative simplifies land verification and promotes transparency in land ownership.
- **Environmental Monitoring: Bhuvan** an Indian web-based application developed by **ISRO** provides satellite data for various environmental and land-use applications.
 - Satellites like the **Oceansat series** provide data on sea surface temperatures, sea level rise, and coastal erosion.

22. (a)

Statement 1 is correct: The **United Nations General Assembly**, during its **70th Session in 2015**, adopted the document titled “**Transforming our World: The 2030 Agenda for Sustainable Development**.”

- This outlines **17 Sustainable Development Goals (SDGs)** and **169 associated targets**.
- The SDGs, also known as the Global Goals, came into force from **2016**.

Statement 2 is not correct: The goal 6 aims to achieve clean water and sanitation.



23. (b)

In News: According to a new study, the origins of life on Earth may have been influenced by natural processes like **crashing waterfalls or breaking waves**. Miller-Urey Hypothesis was proposed in 1952 by Stanley Miller and Harold Urey.

- They demonstrated that **organic compounds necessary for life** could form when electricity (like lightning) interacted with a mixture of water and gases like methane, ammonia, and hydrogen.
- But they faced criticism as lightning was considered infrequent and ineffective in oceanic environments.

24. (b)

In News:

Pair 1 is correctly matched

- **Dinesh Goswami Committee (1990):** On election expenses, voter IDs, and transparent political funding.

Pair 2 is not correctly matched

- **TS Krishnamoorthy:** It has suggested a '**National Election Fund**' as an alternative for election funding.

Pair 3 is correctly matched

- **Vohra Committee (1993):** Criminalization of politics and the nexus among criminals, politicians, and bureaucrats in India.
- Agencies, including the CBI, IB, RAW, had unanimously expressed their opinion that the criminal network was virtually running a parallel government.

Pair 4 is not correctly matched

- **Indrajit Gupta Committee (1998):** Advocated for state funding of elections.

25. (d)

France has discovered a massive 46-million-ton **white hydrogen reserve** in the **Moselle region**, valued at **\$92 trillion**.

- White hydrogen, a naturally occurring gas in the Earth's crust, is a relatively new discovery in the energy sector.
- Unlike other forms — **gray, brown, blue, and green hydrogen** — white hydrogen requires **no industrial production** and **emits no carbon**, making it an **environmentally superior energy source**.

- Its potential is enormous, with deposits found worldwide, including in the **US, Russia, Australia, and Europe.**

26. (a)

Statement 1 is correct: The Wellbeing Research Centre has released the **World Happiness Report 2025.**

- **Published by:** University of Oxford's Wellbeing Research Centre in partnership with Gallup, the UN Sustainable Development Solutions Network.
- Finland emerged as the 'happiest' country again, followed by Denmark and Iceland.

Statement 2 is not correct: India ranked **118 out of 147** countries, India's lowest ranking was 144 on the list in 2012, while its scores peaked in 2022 at 94.

- **Afghanistan** ranked the lowest followed by Sierra Leone and Lebanon.
- Pakistan's rank dropped from 108 to **109**, the country outscored India.

27. (b)

Context

- **The Indian Space Research Organisation (ISRO)** and the **Semiconductor Laboratory (SCL)** in Chandigarh have **jointly developed two cutting-edge 32-bit microprocessors, Vikram 3201 and Kalpana 3201.**

About

- They are optimised **for efficiency and performance**, specifically designed for **space applications.**
- **Vikram 3201** is **India's first fully indigenous 32-bit microprocessor** qualified for use in the **harsh conditions** of launch vehicles and it can **process 32 bits of data at a time.**
 - It supports **floating-point computations** and offers **high-level language compatibility.**
- **Kalpana 3201** is also a 32-bit SPARC V8 RISC microprocessor based on the IEEE 1754 Instruction Set Architecture.
 - It is designed to be **compatible with open-source software toolsets** and has been tested with flight software, making it **versatile for various applications.**

28. (c)

In News

- The Union Home Ministry is currently reviewing the extent of **AFSPA coverage in the states of Manipur, Nagaland, Arunachal Pradesh, and Assam.**
 - This comes after recent ethnic tensions and law-and-order disturbances, particularly in Manipur.

About AFSPA

- Enacted by the Parliament and approved by the **President in 1958.**
- Grants **extraordinary powers & immunity** to the armed forces to bring back order in the **"disturbed areas".**
 - An area can be disturbed due to **differences or disputes b/w members of different religious, racial, language or regional groups or castes or communities.**
- **Human Rights Violations:** Allegations of extrajudicial killings, torture, and sexual violence in conflict zones. Notably highlighted by the **Justice Jeevan Reddy Committee (2005)** and UN agencies.

29. (b)

Gurupadswamy Committee: It was formed in 1979, to study child labour and propose measures.

- Found that poverty was a key barrier to eliminating child labour.
- Recommended banning child labour in hazardous sectors and regulating other areas.
- Advocated for a multiple policy approach.

30. (b)

India has initiated Operation Brahma, a humanitarian mission to assist Myanmar following the devastating 7.7-magnitude earthquake that struck near Mandalay.

- ‘Operation Brahma’ is part of **India’s Act East policy**, and in the past, India has extended similar support, for example:
 - Operation Maitri (2015) – in the aftermath of 2015 Nepal’s earthquake
 - Operation Dost (2023) – to help quake-hit Turkiye and Syria
 - Operation Sadbhav (2024) – to assist typhoon Yagi-affected countries – Myanmar, Laos and Vietnam.

31. (b)

In News

- The central government has announced the establishment of a **second National Gene Bank (NGB)** as a part of the Union Budget 2025-26 under the theme “Investing in Innovations”.

What is Gene Bank?

- A Gene Bank is a bio-repository that **preserves genetic material of plants, animals, and microbes, particularly seeds, tissues, and DNA.**
- In the case of crops, this involves the **storage of germplasm (viable plant material such as seeds)** under controlled conditions to ensure their long-term viability.

Type of Bank	What it Stores	Example
Seed Bank	Seeds under controlled conditions	ICAR-NBPGR, New Delhi
Field Gene Bank	Live plants maintained in the field	For perennial crops like mango
Cryobank	Genetic material stored at ultra-low temperatures (e.g., -196°C in liquid nitrogen)	DNA, pollen, embryos
DNA Bank	Purified DNA samples	Used for genetic research
In Vitro Bank	Plant tissues stored in nutrient mediums	Tissue culture

Need

- The goal of the new NGB is to **conserve 10 lakh crop germplasm.**
- These genetic resources are used for **crop improvement and genetic resource management.**
- The new Gene Bank will have **state-of-the-art infrastructure and aims to expand India’s conservation capacity.**
- It is important for preserving genetic diversity and promoting sustainable agricultural practices to ensure future food security.

Do you Know?

- The **first National Gene Bank** is located at the **ICAR-National Bureau of Plant Genetic Resources (NBPGR) in New Delhi.**

