

DAILY MCQs COMPILATION
with
EXPLANATIONS

JULY 2024

NEXT IAS

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HISTORY, ART & CULTURE

1. Which among the following temples are part of the Sacred Ensembles of the Hoysalas, declared a World Heritage Site by UNESCO in 2023?

1. Mamallapuram Shore Temple
2. Hoysaleswara temple at Halebidu
3. Chennakeshava temple at Belur
4. Keshava temple at Somanathapura, Mysore

Select the correct answer using the code given below:

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

2. In the context of Indian History, leaders like Sidhu and Kanhu Murmu are associated with

- (a) Mapilla rebellion (b) Pabna Movement
(c) Santhal rebellion (d) Indigo Revolt

3. With reference to Indian paintings, Consider the following pairs :

- | Paintings | Region |
|-----------------------|--------------|
| 1. Basohli Painting | : Tamil Nadu |
| 2. Warli painting | : Assam |
| 3. Madhubani painting | : Bihar |

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

4. Consider the following statements about the UNESCO City of Literature program:

1. The program aims to promote cultural diversity and literary heritage in cities around the world.
2. The City of Literature designation is awarded solely based on the number of literary works produced in a city.

Which of the following is/are correct?

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

5. With reference to the history of India, consider the following statement:

1. Buddha was not depicted in the form of an image or sculpture in the 5th/6th Century BCE.
2. Gupta Period Art featured the first Buddharupa.

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. He had led the Rampa rebellion, which was launched in 1922 and is referred to as “Manyam Veerudu” (Hero of the Jungles). He is
- (a) Birsa Munda (b) Ali Musaliyar
(c) Alluri Sitarama Raju (d) Titu Mir
7. With reference to the history of India, who among the following was termed as the ‘Maker of Modern India’ by Netaji Subhas Chandra Bose?
- (a) Swami Vivekananda (b) Bal Gangadhar Tilak
(c) Mahatma Gandhi (d) Raja Ram Mohan Roy
8. It was built in the 12th Century and is known as ‘Yamanika Tirtha’. Also, it is one of India’s Char Dham pilgrimage sites. It is
- (a) Jagannath Temple (b) Ramanathaswamy Temple
(c) Dwarkadhish Temple (d) Badrinath Temple
9. With reference to Indian paintings, Consider the following pairs :
- | Paintings | Region |
|---------------------|------------------|
| 1. Phad paintings | : Rajasthan |
| 2. Thangka painting | : Sikkim |
| 3. Kalamkari | : Andhra Pradesh |
- 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
10. With reference to Indian paintings, Consider the following pairs :
- | Paintings | Region |
|------------------------|--------------|
| 1. Bani Thani Painting | : Rajasthan |
| 2. Tanjore paintings | : Tamil Nadu |
| 3. Cherial painting | : Telangana |
- 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
11. Recently, President Droupadi Murmu visited the Khandagiri and Udayagiri caves. It is located in
- (a) Odisha (b) Tamil nadu
(c) Andhra Pradesh (d) Telangana
12. With reference to the Khandagiri & Udayagiri Caves, which of the following statements is/are correct?
- The rock cut caves were built by King Kharavela of the Meghavahana dynasty.
 - The caves were built for the Buddhist monks and offered them a place to stay and meditate.
- 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
13. Recently, World’s oldest cave paintings were discovered in which of the following countries?
- (a) France (b) Indonesia
(c) Australia (d) Somalia

- 14.** With reference to the classical language status in India, consider the following statements:
1. Marathi is one of the six languages that currently hold classical language status in India.
 2. One of the criteria for classical language status is that the language should have a rich body of ancient literature.
- Which of the following statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) None of the above
- 15.** With reference to Indian rock cut caves, Consider the following pairs :
- | Caves | : | Region |
|--------------------|----------|---------------|
| 1. Udayagiri Caves | : | Rajasthan |
| 2. Ajanta Caves | : | Tamil Nadu |
| 3. Elephanta Caves | : | Telangana |
- 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
- 16.** With reference to the Kartarpur Corridor, consider the following statements:
1. It facilitates visa-free movement for Indian pilgrims to visit Darbar Sahib Gurdwara in Pakistan.
 2. The corridor was inaugurated to commemorate the 550th birth anniversary of Guru Nanak Dev.
- Which of the statements given above is/are **not** correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) None of the above
- 17.** With reference to the Kartarpur corridor, which of the following statements is/are correct?
1. It connects the Gurdwara Darbar Sahib, Pakistan to Gurudwara Dera Baba Nanak, India.
 2. It was opened in 2014 for Sikh devotees in India to visit Gurdwara Darbar Sahib.
- 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
- 18.** He came to be known as the 'Young Turk' leader for his conviction, courage and integrity in the fight against vested interests. He founded and edited 'Young Indian', a weekly published from Delhi in 1969. He also served as the Prime Minister of India. He is
- (a) Charan Singh (b) Vishwanath Pratap Singh
(c) Morarji Desai (d) Chandra Shekhar
- 19.** The term 'Moidams', sometimes appeared in the news, primarily refers to:
- (a) Traditional water harvesting technique
(b) Ancient mound-burial system
(c) Coinage system of Pragjyotisha and Kamrupa
(d) Canal system in Ahom Kingdom

20. Kharchi Puja, also called the 'Festival of 14 Gods' is one of the main festival of
- (a) Assam (b) Nagaland
(c) Tripura (d) Meghalaya
21. He is often called the father of Indian Renaissance and the maker of Modern India. He wrote 'Gift to Monotheists'. He is
- (a) Swami Vivekananda (b) Raja Rammohan Roy
(c) Debendranath Tagore (d) Keshab Chandra Sen
22. Also known as the Grand Old Lady of the Indian Freedom Struggle, she hoisted the Indian National flag at the Gowalia Tank Maidan in 1942. Aside from the Quit India Movement, she participated in the Salt Satyagraha in 1930. She is
- (a) Usha Mehta (b) Aruna Asaf Ali
(c) Matangini Hazra (d) Kanaklata Barua
23. With reference to the socio-cultural reform movements of India, consider the following pairs :
- | Organisation | Founder |
|----------------------------------|-------------------------|
| 1. The Servants of India Society | : Gopal Krishna Gokhale |
| 2. Social Service League | : Behramji M. Malabari |
| 3. Seva Sadan | : Narayan Malhar Joshi |
- 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
24. With reference to the Thangka Art, consider the following statements:
- It is a Bhutanese artform traditionally created on rich cotton or silk applique.
 - The production process is often described as a spiritual practice, involving purification rituals and is accompanied by recitation of mantras.
- 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. Which of the following statements is true about the Mashco Piro Tribe sometimes seen in the news?
- (a) They are primarily settled agriculturalists.
(b) They are believed to be the largest uncontacted tribe.
(c) They live in urban areas of Southeast Asia.
(d) They have regular contact with modern societies.
26. With reference to the tribal communities, Consider the following pairs :
- | Tribes | Region |
|----------------|---------------|
| 1. Mashko Piro | : Peru |
| 2. Maasai | : Kenya |
| 3. Shompen | : Brazil |
- 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

- 27.** Consider the following statements with reference to the World Heritage Committee:
1. In the year 2024, India is hosting the World Heritage Committee Meeting for the first time.
 2. The logo of the 46th World Heritage Committee meeting is inspired by the World Heritage Site of Mahabalipuram.
- 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.** With reference to the National Flag of India, consider the following statements:
1. The flag's proportions are in the ratio of 3:2.
 2. Ashoka Chakra is similar to the wheel that can be seen on the abacus of Ashoka's Sarnath Lion Capital.
 3. Article 50 of the Constitution mentions about the duty of every citizen of India to respect the National Flag.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
- 29.** With reference to Harappan Sites, Consider the following pairs :
- | Harappan Sites | Rivers |
|-----------------------|---------------|
| 1. Mohenjo-Daro | : Indus |
| 2. Lothal | : Saraswati |
| 3. Harappa | : Ravi |
- 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
- 30.** With reference to the Indus valley Civilization, which of the following statements is/are correct?
1. It is also known as a Bronze-age civilization.
 2. Rakhigarhi, is the largest Harappan site of the Indian subcontinent.
- 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
- 31.** He joined the Non-Cooperation Movement at 15 years old in 1921. He was dissatisfied when Mahatma Gandhi decided to put an end to the Non-Cooperation Movement in 1922. He joined significant actions including the Kakori Train Robbery (1925), the killing of John P. Saunders (1928), and the attempted assassination of the Viceroy (1929). He reorganised the Hindustan Republican Association (HRA).
- Who among the following personalities described above ?
- (a) Khudiram Bose (b) Ram Prasad Bismil
(c) Ashfaqulla Khan (d) Chandra Shekhar Azad
- 32.** He was one of the first and strongest advocates of Swaraj ("self-rule") and played an important role in India's freedom movement. He launched two weeklies, Kesari and Mahratta, which criticized British policies of the time.

Which of the following personalities has been described above?

- (a) Mahatma Gandhi (b) Bipin Chandra Pal
(c) Lala Lajpat Rai (d) Bal Gangadhar Tilak

33. Kalaripayattu, an ancient Indian martial art, is primarily associated with which state?

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

34. Consider the following statements:

1. Lingyats are the members of the Hindu sect having a wide following in the Southern part of India.
2. They are the worshippers of Shiva.
3. Lingayats have rejected the Vedas and the caste system.

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

35. With reference to the Vishnupad Temple, consider the following statements:

1. It is located on the banks of the Falgu river.
2. It was built in 1787 on the orders of Queen Ahilyabai Holkar.
3. It is a UNESCO World Heritage Site.

How many of the statements given above are correct?

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

36. With reference to the Lingayats, which of the following statements is/are correct?

1. The Lingayats are followers of 12th-century social reformer Basavanna.
2. They are considered to be the Vaishnavites.

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

37. With reference to the Mahabodhi Temple, consider the following statements:

1. The temple stands to the east of the Mahabodhi Tree, where Gautam Buddha is believed to have attained nirvana.
2. It was built by Queen Ahilyabai Holkar.
3. It is a UNESCO World Heritage Site.

How many of the statements given above are correct?

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

38. Recently, which of the following have been inscribed as the 43rd UNESCO World Heritage Site from India ?

- (a) Assam's Moidams
(b) Santiniketan, West Bengal
(c) Bagh Caves, Madhya Pradesh
(d) Bandhavgarh National Park, Madhya Pradesh

39. Consider the following statements about Tell Umm Amer (Saint Hilarion Monastery) in Palestine:
1. It is one of the earliest monastic sites in the Middle East, dating back to the 4th century.
 2. The site is inscribed on UNESCO's List of World Heritage in Danger due to its proximity to major trade and communication routes between Asia and Africa.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
40. With reference to the Humayun's Tomb, consider the following statements:
1. It was built by his son and third Mughal Emperor Akbar in 1570.
 2. Humayun's garden-tomb is also called the 'dormitory of the Mughals'.
 3. It is a UNESCO World Heritage Site.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

EXPLANATIONS

1. (c)

Context:

- Karnataka tourism plans to promote the UNESCO World Heritage Site of Somanathapura as part of Mysore tourism circuit.
- In 2023, the **Keshava temple at Somanathapura** (Mysore), along with the **Hoysaleswara Temple at Halebidu** and the **Chennakeshava Temple at Belur**, was declared a **World Heritage Site by UNESCO** as part of the **Sacred Ensembles of the Hoysalas**.

2. (c)

Context: Prime Minister Narendra Modi, paid tribute to the sacrifices and bravery of the Santhal tribal community.

Santhal rebellion

- The Santhal rebellion (also known as the Sonthal rebellion or the Santhal Hool) started on 30th June 1855 with the help of prominent leaders like Sidhu and Kanhu Murmu.
- It was a rebellion in present-day Jharkhand and West Bengal, Eastern India against both the British East India Company (BEIC) and Zamindari System by the Santhal.

3. (a)

Madhubani paintings

- These brightly colored Madhubani paintings are characterized by their geometrical patterns and are widely practiced in the Madhubani district in **Bihar**.

Warli Paintings

- Warli painting is of tribal art mostly created by the tribal people from the North Sahyadri Range in **Maharashtra, India**.

Basohli paintings

- It is a style of painting characterized by vigorous use of primary colors and a peculiar facial formula prevailed in the seventeenth and early eighteenth centuries in the foothills of the **Western Himalayas (Jammu and Kashmir, and Punjab)**.

4. (a)

Statement 1 is correct: The UNESCO City of Literature program is part of the Creative Cities Network, which aims to promote cultural diversity and sustainable urban development through creative industries, including literature.

Statement 2 is not correct: The designation considers a range of factors, including the quality, quantity, and diversity of publishing in the city, the quality and quantity of educational programs focusing on domestic or foreign literature, the role of literature, drama, and/or poetry in the urban environment, the existence of libraries, bookstores, and cultural centers, and more.

5. (c)

In News: Recently, the Leader of Opposition in Lok Sabha, in his first speech, invoked the '**Abhaya Mudra**', the gesture of the raised open palm that is commonly understood as conveying reassurance and a freedom from fear.

Statement 1 is correct

- For about 500 years after the **Buddha, who lived in the 5th/6th Century BCE**, the person of the great teacher **was not depicted in the form of an image or sculpture**.
 - At Sanchi, for instance, the Buddha is symbolised by a vacant throne or a footprint.
- The earliest physical depictions of the Buddha emerged around the turn of the first millennium.

Statement 2 is correct

- **Gandhara Art** (in present-day Pakistan and Afghanistan) and **Gupta Period Art** (in the Gangetic plains) featured the **first Buddharupa (Buddha images)**.

6. (c)

Context: Every year, on July 4th the Government of Andhra Pradesh commemorates the birth anniversary of Alluri Sitarama Raju as a state festival.

Alluri Sitarama Raju

- He was born on July 4, 1897 in Mogallu village near Bhimavaram in Andhra Pradesh.
- He had led the Rampa rebellion, which was launched in 1922.
- He is referred to as "Manyam Veerudu" (Hero of the Jungles) by the local people.

7. (a)

In News: Recently, the Prime Minister of India paid homage to Swami Vivekananda on his Punya Tithi.

About Swami Vivekananda

- **Birth:** He was born on **12th January** (celebrated as National Youth Day) **of 1863** in Calcutta as Narendranath Datta, and attained **Mahasamadhi on 4th July 1902**.
- From a young age, he nurtured an interest in **Western philosophy, history, religion, spirituality and theology**.
- He met the religious leader **Ramakrishna Paramhansa**, who later became his Guru and he remained devoted to him until the latter's death in 1886.
- In 1893, he took the **name 'Vivekananda'** after Maharaja Ajit Singh of the Khetri State requested him to do so, changing from 'Sachidananda' that he used before.
- **Netaji Subhas Chandra Bose** had called him the '**Maker of Modern India**'.

8. (a)

News: Recently, President Droupadi Murmu took part in the annual Jagannath Rath Yatra in Puri, Odisha.

Rath Yatra

- It is a significant Hindu festival dedicated to Lord Jagannath, an incarnation of Lord Vishnu.
- During the festival, the idols of Lord Jagannath, along with his siblings Lord Balabhadra and Goddess Subhadra, are placed on grand chariots and pulled by devotees through the streets.
- This procession begins at the Jagannath Temple and ends at the Gundicha Temple, covering a distance of about 3 kilometers.
- The Rath Yatra is the only time when Lord Jagannath comes out of his holy abode so that people of all religions can see him as only Hindus are allowed into the temple on regular days.

Jagannath Temple

- Built in the 12th Century AD by King Anantavarman Deva of the Eastern Ganga Dynasty.
- Also called '**Yamanika Tirtha**', it is one of the Char Dham pilgrimage sites in India, the others being Rameswaram, Badrinath and Dwarka.

9. (c)

Context:

- The **Ministry of Culture** initiates Project PARI for the **46th World Heritage Committee Meeting**.

About:

- **Project PARI (Public Art of India)**, seeks to bring forth public art that draws inspiration from millennia of artistic heritage while incorporating modern themes and techniques.
- Artists from all over the country have come together to create the various **wall paintings, murals, sculptures and installations** being prepared under this project.
- The creative canvas inspired by the styles of;
 - **Phad paintings** (Rajasthan), **Thangka painting** (Sikkim/Ladakh), **Gond art** (Madhya Pradesh), **Tanjore paintings** (Tamil Nadu), and
 - **Kalamkari** (Andhra Pradesh), **Alpona art** (West Bengal), **Cheriyal painting** (Telangana), **Pichhwai Painting** (Rajasthan), **Lanjia Saura** (Odisha), and
 - **Pattachitra** (West Bengal), **Bani Thani Painting** (Rajasthan), **Warli** (Maharashtra), **Pithora Art** (Gujarat), **Aipan** (Uttarakhand), **Kerala Murals** (Kerala), **Alpana art** (Tripura) and more.

10. (c)

Context:

- The **Ministry of Culture** initiates Project PARI for the **46th World Heritage Committee Meeting**.

About:

- **Project PARI (Public Art of India)**, seeks to bring forth public art that draws inspiration from millennia of artistic heritage while incorporating modern themes and techniques.
- Artists from all over the country have come together to create the various **wall paintings, murals, sculptures and installations** being prepared under this project.
- The creative canvas inspired by the styles of;
 - **Phad paintings** (Rajasthan), **Thangka painting** (Sikkim/Ladakh), **Gond art** (Madhya Pradesh), **Tanjore paintings** (Tamil Nadu), and
 - **Kalamkari** (Andhra Pradesh), **Alpona art** (West Bengal), **Cheriyal painting** (Telangana), **Pichhwai Painting** (Rajasthan), **Lanjia Saura** (Odisha), and
 - **Pattachitra** (West Bengal), **Bani Thani Painting** (Rajasthan), **Warli** (Maharashtra), **Pithora Art** (Gujarat), **Aipan** (Uttarakhand), **Kerala Murals** (Kerala), **Alpana art** (Tripura) and more.

11. (a)

Context: President Droupadi Murmu, visited the Khandagiri and Udayagiri caves in Bhubaneswar, Odisha.

About:

- The rock cut caves were built around the **2nd century BC** by **King Kharavela** of the **Meghavahana dynasty**.
- These were first discovered by British Officer **Andrew Sterling** in the 19th century AD.
- The caves were built for the **Jain monks** and offered them a place to stay and meditate.
- Originally there were around one hundred and seventeen caves built. However only **thirty-three caves survive** today.
- **Eighteen caves** are located in the Udaygiri hill and **fifteen** in the Khandagiri hill.

12. (a)

Context:

- President Droupadi Murmu, visited the Khandagiri and Udayagiri caves in Bhubaneswar, Odisha.

About:

- The rock cut caves were built around the **2nd century BC** by **King Kharavela** of the **Meghavahana dynasty**.
- These were first discovered by British Officer **Andrew Sterling** in the 19th century AD.
- The caves were built for the **Jain monks** and offered them a place to stay and meditate.
- Originally there were around one hundred and seventeen caves built. However only **thirty-three caves survive** today.
 - **Eighteen caves** are located in the Udaygiri hill and **fifteen** in the Khandagiri hill.

13. (b)

Recently, Scientists have discovered World's oldest cave paintings.

- Until now, the oldest-known cave painting was one at Leang Tedongnge cave, also in Sulawesi, from at least 45,500 years ago.
- The cave painting was found on the ceiling of **Leang Karampuang cave** in the Maros-Pangkep region of **South Sulawesi, Indonesia**.
 - It depicts three human-like figures interacting with a wild pig, painted in dark red pigment.

14. (b)

In News: The Government of India is revising the criteria for granting classical language status to be more inclusive and representative of India's linguistic diversity.

Statement 1 is not correct: Marathi is not currently a classical language. The six classical languages in India are Tamil, Sanskrit, Telugu, Kannada, Malayalam, and Odia.

Statement 2 is correct: A rich body of ancient literature is indeed one of the criteria for a language to be considered for classical status.

15. (d)

Context:

- President Droupadi Murmu, visited the Khandagiri and **Udayagiri caves in Bhubaneswar, Odisha**.

Udayagiri caves

- The rock cut caves were built around the **2nd century BC** by **King Kharavela** of the **Meghavahana dynasty**.

- These were first discovered by British Officer **Andrew Sterling** in the 19th century AD.
- The caves were built for the **Jain monks** and offered them a place to stay and meditate.

Elephanta Caves

- The rock-cut Elephanta Caves were constructed about the mid-5th to 6th centuries AD.
- The Elephanta Caves are a collection of cave temples dedicated to the Hindu god Shiva, which have been designated a UNESCO World Heritage Site.
- They are on Elephanta Island, or Gharapuri, in Mumbai Harbour, **Maharashtra**.

Ajanta Caves

- The Ajanta Caves are Buddhist cave monuments dating from the second century BCE to about 480 CE in the Aurangabad district of **Maharashtra**.
- The caves at Ajanta are excavated out of a vertical cliff above the left bank of the **river Waghora**, in the hills of Ajanta.

16. (a)

Statement 1 is NOT correct: Indian pilgrims do not have visa-free movement. They require a permit to cross into Pakistan through the Kartarpur Corridor.

Statement 2 is correct: The corridor was inaugurated to celebrate Guru Nanak Dev's 550th birth anniversary in 2019.

17. (a)

Kartarpur corridor

- The Kartarpur Corridor is a visa-free border crossing and religious corridor, **connecting the Gurdwara Darbar Sahib, in Pakistan to Gurudwara Dera Baba Nanak, Gurdaspur, Punjab, India.**
- It was opened in November **2019**, which allows Sikh devotees in India to visit Gurdwara Darbar Sahib.
- **Village Kartarpur** is located at the west bank of **river Ravi** where Sri Guru Nanak Dev Ji spent the last 18 years of his life.
- **Gurdwara Dera Baba Nanak** is about 1 km from the Indo- Pakistan border and on the east bank of River Ravi.

18. (d)

Context: Recently, tributes were paid to the former Prime Minister Chandra Shekhar on his death anniversary.

Chandra Shekhar

- He was born on April 17, 1927 in Ballia, and passed away on July 8, 2007.
- He served as the 8th Prime Minister of India, between 10 November 1990 and 21 June 1991.
- He founded and edited **Young Indian**, a weekly published from Delhi in 1969.
- He is also known as '**Young Turk**' for his conviction, courage and integrity in the fight against vested interests.

19. (b)

In News: Recently, the Ahom era 'Moidams' in Assam's Charaideo district, were recommended for UNESCO World Heritage status.

- The term '**Moidam**' refers to the **ancient mound-burial system** of the **Ahom Dynasty**, which ruled over Assam in northeastern India.

- These Moidams **serve as the final resting places for Ahom royalty**, preserving not only their mortal remains but also the cherished objects associated with them.
- **Charaideo Necropolis** are pyramid-like structures that silently narrate the saga of Ahom royalty, their legacies, and the passage of time, situated on elevated land.

20. (c)

News: Recently, Prime Minister Narendra Modi extended wishes for Kharchi Puja, a festival celebrated prominently in Tripura.

Kharchi Puja

- Also called the 'Festival of 14 Gods', Kharchi Puja is observed on the eighth day of the new moon in July or August every year.
- The festival is centred around the worship of Chaturdasa Devata, the ancestral deity of the Tripuri people.
- The word 'Kharchi' is derived from two Tripuri words—'khar' or kharta meaning sin and 'chi' or si meaning cleaning.
- During the festival, the people of Tripura also worship the earth along with their 14 deities. Although the festival has tribal origins, it is celebrated by both tribal and non-tribal people of Tripura.

21. (b)**Raja Rammohan Roy (1772-1833)**

- He is often called the father of Indian Renaissance and the maker of Modern India.
- Rammohan Roy believed in the modern scientific approach and principles of human dignity and social equality.
- He put his faith in monotheism. He wrote *Gift to Monotheists* (1809) and translated into Bengali the Vedas and the five Upanishads to prove his conviction that ancient Hindu texts support monotheism.

22. (b)

Context: On July 16, 1909 freedom fighter Aruna Asaf Ali was born.

About:

- Also known as the **Grand Old Lady** of the Indian Freedom Struggle, Aruna Asaf Ali hoisted the Indian National flag at the Gowalia Tank Maidan in 1942.
- Aside from the Quit India Movement, she participated in the **Salt Satyagraha** in 1930.
- In 1932, she underwent a hunger strike to improve the living conditions of prisoners in Tihar jail. The fast-to-death resulted in a marked improvement of their living conditions.
- Post-independence, she remained active in politics, becoming Delhi's first Mayor. She was also awarded the Padma Vibhushan in 1992 and the Bharat Ratna posthumously in 1997.

23. (a)**The Servants of India Society**

- **Gopal Krishna Gokhale (1866-1915)**, a liberal leader of the Indian National Congress, founded the Servants of India Society in 1905 with the help of M.G. Ranade.
- The aim of the society was to train national missionaries for the service of India; to promote, by all constitutional means, the true interests of the Indian people; and to prepare a cadre of selfless workers who were to devote their lives to the cause of the country in a religious spirit.

Social Service League

- **Narayan Malhar Joshi** founded the Social Service League in Bombay with an aim to secure for the masses better and reasonable conditions of life and work.

Seva Sadan

- A Parsi social reformer, **Behramji M. Malabari** (1853-1912), founded the Seva Sadan in 1908 along with a friend, Diwan Dayaram Gidumal.
- Malabari spoke vigorously against child marriage and for widow remarriage among Hindus.

24. (b)

Statement 1 is not correct: It is a **Tibetan artform** traditionally created on **rich cotton or silk applique**.

Statement 2 is correct: The intricate pieces depict the **life story of Buddha or other Buddhist deities** and **influential Lamas** and serve both as **devotional objects and teaching tools**.

- The production process is often described as a **spiritual practice**, involving **purification rituals** and is accompanied by **recitation of mantras**.

25. (b)

In News: Indigenous rights NGO Survival International has released rare pictures of the Mashco Piro tribespeople.

They are one of the world's largest uncontacted tribes, meaning they actively avoid contact with outsiders. They live a nomadic lifestyle as hunter-gatherers in the remote regions of the Amazon rainforest in southeastern Peru.

26. (b)

The Maasai are a Nilotic ethnic group inhabiting northern, central and southern **Kenya** and northern **Tanzania**, near the **African Great Lakes region**.

- **The Shompen** are the Indigenous people of the interior of **Great Nicobar Island**, part of the Indian union territory of **Andaman and Nicobar Islands**.
- The **Mashco Piro** are Nomadic hunter-gatherers who inhabit the remote regions of the **Amazon rainforest**. They live in **Manú National Park** in the Madre de Dios Region in **Peru**.

27. (a)

News: The Prime Minister, Shri Narendra Modi inaugurated the 46th Session of the World Heritage Committee at Bharat Mandapam in New Delhi.

About:

- India is hosting the World Heritage Committee Meeting for the **first time**.

World Heritage Committee

- The World Heritage Committee meets annually and is responsible for managing all matters on World Heritage and deciding on sites to be inscribed on the World Heritage list.
- The logo of the 46th World Heritage Committee meeting is inspired by the **World Heritage Site of Hampi**.
- The tagline of the logo is **सह नौ यशः**: which means in English as 'May our Glory Grow'.

28. (a)

Statement 1 is not correct: The Indian national flag, known as the "**Tiranga**", features three **horizontal stripes of equal width**.

- The flag's proportions are in the ratio of **2:3** and the **Ashoka Chakra has 24 spokes, representing continuous progress**.

Statement 2 is correct: Ashoka Chakra is similar to the wheel that can be seen on the **abacus of Ashoka's Sarnath Lion Capital**, with 24 spokes and its diameter is about equal to the width of the white band.

Statement 3 is not correct: Part IV-A of the Constitution: According to **Article 51A (a)**, It shall be the duty of every citizen of India to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem.

29. (b)

All three pairs are correctly matched

- Mohenjo-daro is located off the right (west) bank of the lower **Indus river** in Sindh, Pakistan.
- The archaeological remains of the Harappa port-town of **Lothal** is located along the **Bhogava river**, a tributary of Sabarmati, in the Gulf of Khambhat.
- **Harappa**, is located in eastern Pakistan on the left bank of the **Ravi River**.

30. (c)

Harappan Civilization

- The Harappan civilization is believed to be **one of the oldest world civilizations** together with Egypt and Mesopotamia.
- It was developed along the **river Indus** and for that reason it is also known as the **Indus Valley Civilization**.
- The Harappan civilization is identified as a **Bronze-age civilization** because many objects have been found that are made up of **copper based alloys**.
- **Rakhigarhi**, is the largest Harappan site of the Indian subcontinent.

31. (d)

The Prime Minister, Shri Narendra Modi has paid tributes to Chandra Shekhar Azad on his birth anniversary.

- Chandra Shekhar Tiwari, popularly known as Chandra Shekhar Azad, was born on 23 July 1906.'
- **He** joined the Non-Cooperation Movement at 15 years old in 1921. Disillusioned by the suspension of the Non-Cooperation Movement in 1922, he joined the Hindustan Republican Association (HRA) led by Ram Prasad Bismil.
 - Participated in fundraising through robberies of government establishments.
 - Joined significant actions including the **Kakori Train Robbery (1925)**, the **killing of John P. Saunders (1928)**, and the **attempted assassination of the Viceroy (1929)**.
- In 1928, Azad, along with Bhagat Singh and others, reorganized the HRA into the Hindustan Socialist Republican Association (HSRA) with the aim of achieving an independent India based on socialist principles.

32. (d)

Context: PM Narendra Modi paid tributes to **Lokmanya Tilak** (Bal Gangadhar Tilak) on his birth anniversary.

About:

- **Birth:** Born on **July 23, 1856**, in Maharashtra's Ratnagiri.
- He was a freedom fighter, social thinker, philosopher, teacher, and one of the **first and strongest advocates of Swaraj ("self-rule")** who had played an important role in India's freedom movement.

Literary Work

- He launched two weeklies, **Kesari (in Marathi)** and **Mahratta (in English)**, which criticized British policies of the time.
- He published **The Orion or Researches into the Antiquity of the Vedas (1893)** and **The Arctic Home in the Vedas (1903)**.
- In the **Mandalay jail**, he wrote the **Srimad Bhagavadgita Rahasya (Secret of the Bhagavadgita)**, an original exposition of the most sacred book of the Hindus.

33. (a)

In News: Ministry of Youth Affairs & Sports Recognizes Kalaripayattu Federation of India for Promotion of Kalaripayattu in Country.

About Kalaripayattu

- Kalaripayattu is a traditional Indian martial art that originated in the state of **Kerala**. It is a complex and holistic system that combines physical movements, meditation, and breathing techniques to develop a practitioner's physical, mental, and spiritual abilities.
- Kalaripayattu is known for its unique blend of martial arts, yoga, and dance, which helps to improve strength, flexibility, and coordination.

34. (d)

In News: Panchamasali Lingayats, a sub-caste of Karnataka's dominant Lingayat community, have been demanding inclusion in Category 2A of the Other Backward Classes (OBC) for more than three years.

About:

The Lingayats (officially classified as Hindu sub-caste 'Veerashaiva Lingayats') are followers of Basavanna, a 12th century philosopher-saint who started a radical anti-caste movement which **rejected orthodox ritualistic Hindu practices** in favour of a more personal, affective relationship with God, specifically **Lord Shiva**. They have a wide following in the **Southern part of India**. Lingayats constitute 17% of the total population in Karnataka.

35. (b)

Statement 1 and 2 are correct: The Vishnupad Temple at Gaya: The Hindu temple is dedicated to Lord Vishnu.

- Architecturally, the temple is around 100 feet tall and has 44 pillars.
- It is located on the **banks of the Falgu river** and was built in **1787** on the orders of **Queen Ahilyabai Holkar** of Ahmadnagar.

Statement 3 is not correct: It is **not** a UNESCO World Heritage Site.

36.(a)**Lingayats**

- The Lingayats are followers of **12th-century social reformer Basavanna**, who was inspired by the Bhakti Movement.
- A treasurer in the court of **King Bijjala II**, Basavanna rejected Brahmin rituals and temple worship and envisaged a society that was casteless, free of discrimination, and where men and women had equal opportunities.
- Lingayats are considered to be **Shaivites**.

37.(b)

Statement 1 is correct: Mahabodhi Temple at Bodh Gaya stands to the **east of the Mahabodhi Tree**, where Gautam Buddha is believed to have attained nirvana.

Statement 2 is not correct: The Mahabodhi Temple Complex is the first temple **built by Emperor Asoka** in the 3rd century B.C., and the present temple dates from the 5th–6th centuries.

Statement 3 is correct: The Mahabodhi Temple Complex at Bodh Gaya is a **UNESCO World Heritage Site**.

38. (a)

News

- Assam's Moidams, also known as the 'Pyramids of India,' have been inscribed as the 43rd UNESCO World Heritage Site, during the ongoing 46th session of the World Heritage Committee at New Delhi.

Assam's Moidams

- The Moidams at Charaideo, are a series of grand, earthen mounds that serve as the burial sites for the Ahom royalty.
- These structures date back to the 13th century and showcase the intricate funerary practices and cosmological beliefs of the Tai-Ahom people.
- The Moidams are characterized by their hemispherical shape, brick structures, and octagonal boundary walls with arched gateways.

39.(a)

Statement 1 is correct: Saint Hilarion Monastery, also known as Tell Umm Amer, is a significant archaeological site located in the Gaza Strip, Palestine. It is renowned for being one of the **oldest Christian monasteries** in the region, dating back to the **4th century CE**. Founded by Saint Hilarion, a prominent figure in early Christian monasticism, the monastery served as a crucial center for religious and cultural exchange.

Statement 2 is not correct: The site's inclusion on UNESCO's List of World Heritage in Danger is not specifically due to its proximity to trade routes, but rather due to other threats like neglect, environmental factors, and political instability.

40. (b)

Statement 1 is not correct: The tomb of Humayun, **second Mughal Emperor** of India, was built by his widow, **Biga Begum (Hajji Begum)**, in **1569-70**, 14 years after his death.

Statement 2 and 3 are correct: Humayun's garden-tomb is also called the '**dormitory of the Mughals**' as in the cells are buried over 150 Mughal family members.

- The tomb stands in an extremely significant archaeological setting, centred at the Shrine of the **14th century Sufi Saint, Hazrat Nizamuddin Auliya**.
- In **1993** it was declared a **UNESCO World Heritage site**.



ECONOMY

1. With reference to the 'Financial Services Institution Bureau (FSIB)', consider the following statements:

1. It is a statutory body in India established by an Act of Parliament.
2. It primarily recommends candidates for appointment as whole-time directors on the boards of financial services institutions.

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. Consider the following statements about Ways and Means Advances (WMA):

1. WMA is a long-term loan facility provided by the Reserve Bank of India (RBI) to the Government of India.
2. The interest rate charged on WMA is always 2% higher than the repo rate.
3. The limits for WMA are mutually decided by the Government of India and the RBI, and are revised periodically.

Which of the above statements is/are correct?

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

3. Which of the following statements is correct about "Project Nexus"?

- (a) It will enable instant cross-border retail payments.
- (b) It is a cease-fire deal that could end the war in Gaza.
- (c) It focuses on Training of Indian Armed Forces in Russia.
- (c) It will resolve the India-Sri Lanka fishing dispute.

4. With reference to the Goods and Services Tax (GST) Council, which of the following statements is/are correct?

1. It is a constitutional body established under Article 279A of the Indian Constitution.
2. The Union Finance Minister is the Chairperson of the Council.

Select the correct answer using the code given below:

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

5. With reference to the Araku Coffee, which of the following statements is/are correct?

1. It is cultivated in the hilly terrains of the Andhra Pradesh and the Odisha region.
2. It received the Geographical Indication (GI) tag in 2019.

Select the correct answer using the code given below:

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

6. With reference to the Agricultural and Processed Food Products Export Development Authority (APEDA), consider the following statements:
1. APEDA is responsible for the import and export of agricultural and processed food products in India.
 2. APEDA facilitates the registration of Geographical Indications (GI) for Indian products abroad.
- 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. With reference to the Securities Appellate Tribunal (SAT), consider the following statements:
1. It is an executive body.
 2. The SAT has jurisdiction over the entire territory of India.
 3. The Presiding Officer of the SAT is appointed in consultation with the Chief Justice of India.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2, and 3
8. Which of the following are components of Current Account?
1. Remittances and Grants
 2. Government Aid
 3. Foreign Direct Investment
 4. Software Services
- Select the correct answer using the code given below:
- (a) 1, 2, and 4 only (b) 2 and 3 only
(c) 1 and 4 only (d) 1, 2, 3, and 4
9. With reference to stablecoins, consider the following statements:
1. Stablecoins are cryptocurrencies designed to maintain a consistent value relative to a specific asset or basket of assets.
 2. The primary purpose of stablecoins is to provide a secure and reliable alternative to traditional banking systems.
 3. The value of a stablecoin is always pegged 1:1 to the U.S. dollar.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2, and 3
10. If India's BoP shows a deficit in the current account, it implies that:
- (a) India is exporting more goods and services than it is importing.
 - (b) India's net foreign investments are exceeding its foreign liabilities.
 - (c) India is receiving more foreign aid and remittances than it is giving.
 - (d) India's payments for imports and other transactions exceed its receipts from exports and other sources.
11. With reference to Balance of Payments, which of the following constitutes/constitute the Current Account?
1. Balance of Trade
 2. Foreign Assets
 3. Balance of Invisibles
 4. Special Drawing Rights

Select the correct answer using the code given below:

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

12. Consider the following statements:

1. White goods are electrical products that are relatively light in weight like TV, radio, computers, etc.
2. Brown goods are electrical products that are heavier goods like refrigerators, washing machines, air conditioners etc.

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 “zombie startups,” consider the following statements:

1. They are characterized by insufficient funding during their initial growth phase.
2. They often lack products or services that meet market demand.
3. A “funding winter” can contribute to a startup becoming a zombie.

Which of the statements given above is/are correct?

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

14. With reference to the Financial inclusion index, which of the following statements is/are correct?

1. It was launched by the Securities and Exchange Board of India (SEBI) in 2021.
2. The Index comprises three broad parameters, access, usage, and quality.

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

15. Which of the following statements are correct regarding Jute cultivation in India?

1. It is a Kharif crop primarily grown in alluvial soil.
2. High temperature, heavy rainfall, and humidity are favorable conditions for its growth.
3. India is the largest exporter of raw jute and jute goods globally.

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

16. ‘Upper Siang hydropower project’ recently seen in the news, is proposed in which of the following States?

- (a) Assam (b) Arunachal Pradesh
(c) Nagaland (d) Meghalaya

17. Which of the following states is a major producer of makhana (an aquatic crop)?

- (a) West Bengal (b) Bihar
(c) Odisha (d) Assam

18. Consider the following statements:

1. India is the largest producer of Fox nuts in the world.
2. Maharashtra is the largest producer of foxnut 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

- 19.** With reference to the Finance Commission, which of the following statements is/are correct?
1. It is a Statutory body that recommends how tax revenues should be distributed among the Centre and various States in the country.
 2. The Centre is legally bound to implement the suggestions made by the Commission.

Select the correct answer using the code given below:

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

- 20.** With reference to the Coal Controller Organisation in India, consider the following statements:
1. It is a nodal office for collection, compilation and dissemination of coal statistics in the government of India.
 2. It acts as the appellate authority in case of dispute between consumers and owner arising out of declaration of grade of coal.

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 India's electronics sector, which of the following statements is/are correct?
1. The electronics market of India is estimated at US\$ 4.3 trillion in FY23.
 2. India is the world's largest electronics producer, accounting for nearly 60% of worldwide electronics production.

Select the correct answer using the code given below:

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

- 22.** Consider the following statements about Uranium (U):
1. Uranium is a dense, hard metallic element that is silvery white in colour.
 2. India has no significant reserves of Uranium.
 3. Punjab is the worst-affected state in terms of the percentage of wells found to have uranium concentration.

Which of the above given statements are correct?

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

- 23.** Consider the followings statements
1. Future and options in the share market are contracts which derive their price from an underlying asset.
 2. In a future contract, the buyer has the obligation to buy the assets but in the option contract, customers have no obligation to buy the assets.

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

- 24.** With reference to the Economic Survey of India, consider the following statements:
1. It is prepared by the Economic Division of the Department of Economic Affairs in the Ministry of Finance.
 2. It was first introduced in 1950-51 as part of the Budget documents.
- 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.** With reference to “World Intellectual Property Organization”, consider the following statements:
1. It is the global forum for intellectual property (IP) services, policy, information and cooperation.
 2. India is not a member of the World Intellectual Property Organization.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 26.** With reference to the Capital Gains Tax, which of the following statements is/are correct?
1. It is a form of direct tax that is paid due to the income that is earned from the sale of assets.
 2. Long-term gains are levied on profits of investments held for more than three years.
- 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
- 27.** Consider the following statements:
1. India is the largest tea producing country in the world.
 2. Assam grows about 55% of the teas produced 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
- 28.** Which of the following statements is correct regarding the terms and allocation of collateral between common lenders in the event of a borrower’s default?
- (a) It describes the borrower’s exclusive rights to collateral in the event of a default.
 - (b) It establishes the borrower’s rights and positions concerning collateral, payment, and payment priority, as well as the hierarchy between various creditors.
 - (c) It ensures that all lenders equally share the collateral without any hierarchy.
 - (d) It negates the need for any decision-making process among lenders in the event of a default.
- 29.** Which one of the following countries banned Uranium Mining at Jabiluka site, which is home to one of the world’s largest deposits of high-grade uranium?
- (a) Australia (b) Brazil
(c) Peru (d) Argentina
- 30.** With reference to the Cooperative Banks, which of the following statements is/are correct?
1. They belong to their members who are both the owners and customers of the bank.
 2. Securities and Exchange Board of India is responsible for the lending norms of these banks.

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

31. With reference to the 'Liquidity Coverage Ratio (LCR) of Reserve Bank of India (RBI)', consider the following statements:

1. It measures a bank's ability to meet short-term liquidity needs during a crisis.
2. It could prevent the crisis from spreading and causing greater economic harm.

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

32. Which of the following statements regarding wilful defaulters is correct?

- (a) A wilful defaulter is a borrower who defaults on a loan due to genuine financial hardship.
- (b) To be classified as a wilful defaulter, the outstanding loan amount must be less than ₹1 crore.
- (c) Wilful defaulters face legal repercussions and restrictions on accessing credit in the future.
- (d) Both (b) and (c)

EXPLANATIONS

1. (b)

In News: Recently, the Financial Services Institution Bureau (FSIB) has selected Challa Sreenivasulu Setty as the next chairman of State Bank of India (SBI).

Statement 1 is not correct

- It is an **autonomous body** of Government of India for developing and implementing appropriate methodologies for making recommendations for appointments, **extension and termination of members** of the Boards in the institutions specified in the **Government of India gazette notification**.
- It was established by the Central government **to replace the Banks Board Bureau (BBB)**.
- Earlier, the Delhi High Court ruled that the **BBB lacked competence** to select general managers and directors of state-run general insurers.

Statement 2 is correct

- Its primary mandate is **to recommend candidates for appointment** as whole-time directors and non-executive chairpersons on the boards of financial services institutions.
- Additionally, the FSIB aims to advise on personnel management matters within these institutions.

2. (c)

Statement 1 is not correct: WMA is a short-term financing facility, not a long-term loan.

Statement 2 is not correct: The interest rate on WMA is the prevailing repo rate unless the advance is not repaid within 90 days, in which case it becomes an overdraft and the interest rate increases by 2%.

Statement 3 is correct: The limits for WMA are indeed mutually decided and revised periodically by the Government of India and the RBI.

3. (a)

The Reserve Bank of India (RBI) has joined Project Nexus

- Project Nexus is conceptualised by the Innovation Hub of the Bank for International Settlements (BIS).
- It seeks to enhance **cross-border payments** by connecting multiple domestic instant payment systems (IPS) globally.
- It is the first BIS Innovation Hub project in the payments area to move towards live implementation.

4. (c)

Goods and Services Tax (GST) Council

- The Goods and Services Tax (GST) Council is a **constitutional body established under Article 279A** of the Indian Constitution through the **101st Amendment Act of 2016**.
- **The Union Finance Minister** is the Chairperson of the GST Council.
- The GST Council makes recommendations to the Union and the States on key GST-related issues, including:
 - Taxes, cesses, and surcharges to be subsumed under GST
 - Goods and services to be subject to or exempt from GST
 - Model GST laws, principles of levy, and apportionment of IGST
 - Tax rates, thresholds, special provisions, and any other matter relating to GST
- **Dispute resolution:** The Council also serves as a platform to resolve disputes between the Centre and the States or among the States themselves on GST-related matters.
- The Centre has one-third of the total voting power, while the States collectively have two-thirds.

5. (c)

Cultivation of Araku coffee

- Araku Valley Arabica coffee is cultivated in the hilly terrains of the Visakhapatnam district in **Andhra Pradesh and the Odisha region**, at elevations of **900-1100 meters** above sea level.
- This coffee is produced by tribal communities using organic methods, focusing on organic manures, green manuring, and organic pest management.
- Araku coffee received its **Geographical Indication (GI) tag in 2019**.

6. (b)

Statement 1 is not correct: APEDA is focused on the export promotion and development of agricultural and processed food products, not imports.

Statement 2 is correct: APEDA does facilitate GI registration for Indian products abroad, providing protection and recognition. APEDA serves as the Secretariat to the National Accreditation Board, playing a key role in overseeing organic product certification.

7. (b)

Statement 1 is not correct: SAT is a statutory body established under the SEBI Act, 1992.

Statement 2 is correct: SAT's jurisdiction extends across the whole of India, even though it has a single bench located in Mumbai.

Statement 3 is correct: The Presiding Officer of SAT is indeed appointed by the Central Government in consultation with the Chief Justice of India or their nominee.

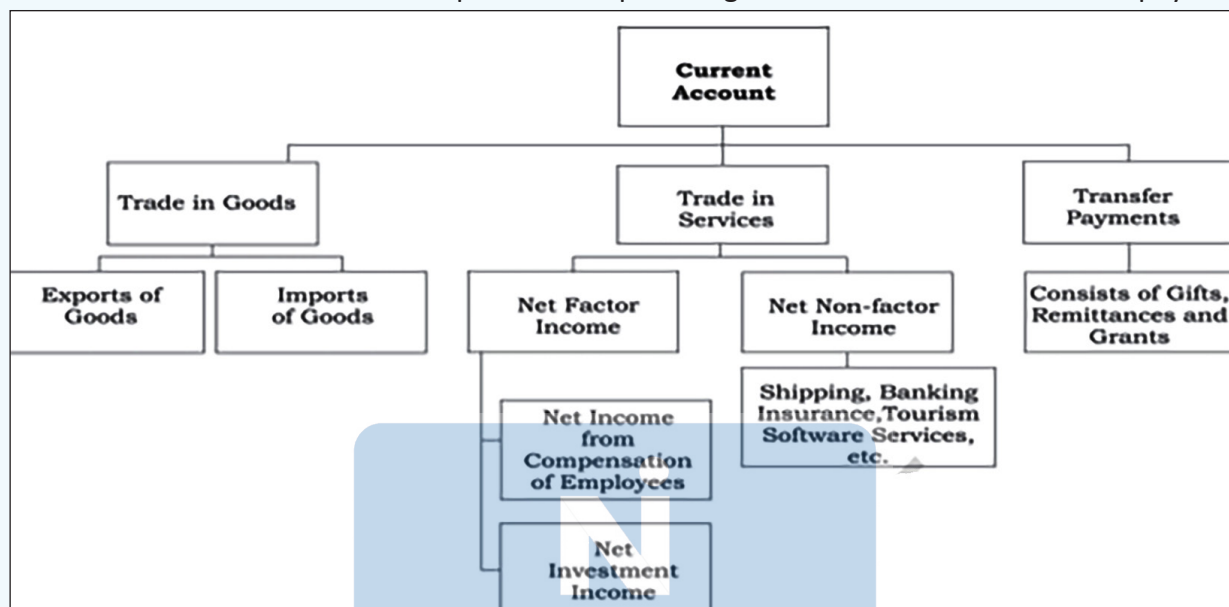
[**Note:** The Primary functions of the body are to hear and dispose of appeals against orders passed by SEBI or an adjudicating officer under SEBI Act, Insurance Regulatory Development Authority of India and Pension Fund Regulatory and Development Authority.]

8. (c)

In News : India's current account registered a surplus during the fourth quarter (Jan-Mar) of the 2023-24 financial year.

Balance of Payments It records the transactions in goods, services and assets between residents of a country with the rest of the world for a specified time period typically a year.

- There are two main accounts in the BoP – the current account and the capital account
- The **current account** records exports and imports in goods and services and transfer payments.



9. (a)

Statement 1 is correct: Stablecoins are designed to maintain a stable value by pegging them to underlying assets like fiat currencies, commodities, or other cryptocurrencies.

Statement 2 is not correct: While stablecoins offer stability within the crypto market, their primary purpose is not to replace traditional banking systems but rather to provide a less volatile digital asset for transactions and as a store of value within the crypto ecosystem.

Statement 3 is not correct: Not all stablecoins are pegged to the U.S. dollar. Some are pegged to other fiat currencies like the Euro, while others are pegged to commodities like gold or even to a basket of cryptocurrencies.

10. (d)

The BoP reflects the relative demand for the Indian rupee compared to foreign currencies, as it shows the balance of transactions between India and the rest of the world. A current account deficit means that a country is spending more on imports of goods and services than it is earning from exports and other receipts.

11. (c)

The Current Account of the Balance of Payments (BoP) includes the following:

- **Balance of trade:** This refers to the difference between the value of a country's exports and imports of goods.
- **Balance of invisibles:** This includes the net trade in services (e.g., tourism, transportation), net income (e.g., interest, dividends), and net transfers (e.g., remittances, foreign aid).

The following are not part of the Current Account:

- **Foreign assets:** These are part of the Capital Account, which tracks the flow of investments into and out of the country.

- **Special Drawing Rights (SDRs):** These are international reserve assets created by the International Monetary Fund (IMF) and are also part of the Capital Account.

12. (d)

Both the statements are not correct.

News: Recently, the Indian Government has reopened the application window for the Production linked Incentive (PLI) scheme for white goods, citing industry appetite to invest more in the scheme originally launched in 2021.

What are brown goods and white goods?

- **Brown goods:** These are electrical products that are relatively light in weight like TV, radio, computers, etc.
- **White goods:** These are electrical products that are heavier goods like refrigerators, washing machines, air conditioners etc.

13. (b)

Statement 1 is not correct: Zombie startups typically have raised enough funds to operate, especially during boom cycles, but they struggle to generate significant revenue.

Statement 2 is correct: A lack of market-suitable products is a common characteristic of zombie startups.

Statement 3 is correct: A funding winter, where investment capital dries up, can push startups into a zombie state as they struggle to secure additional funding for growth.

14. (b)

What is RBI's financial inclusion index?

- In 2021, the **Reserve Bank of India (RBI)** launched a Financial Inclusion Index (FI-Index) to track the process of ensuring access to financial services, timely and adequate credit for vulnerable groups such as weaker sections and low-income groups at an affordable cost.
- The index incorporates the **details of banking, investment, insurance, postal, and pension sectors** in consultation with government and respective sector regulators.
- The FI-Index has been constructed **without any 'base year'**. The FI-Index is **published annually** in July.

Range and Parameters of FI-Index

- The index captures information on various aspects of financial inclusion in a single value ranging between 0 and 100, where **0 represents complete financial exclusion** and **100 indicates full financial inclusion**.
- The FI-Index comprises three broad parameters, **access (35%), usage (45%), and quality (20%)**, with each of these consisting of various dimensions, which are computed based on a number of indicators.

15. (a)

Statement 1 is correct: Jute is a Kharif crop, sown in the rainy season and harvested in autumn. Alluvial soil, rich in nutrients, is ideal for its cultivation.

Statement 2 is correct: Jute thrives in hot and humid climates with abundant rainfall. These conditions are prevalent in the jute-growing regions of India.

Statement 3 is not correct: While India is the largest producer of raw jute and jute goods, it is the second-largest exporter after Bangladesh.

16. (b)

Context: Local communities are protesting against the proposed 11,000-megawatt hydropower project on the Siang River in Arunachal Pradesh.

About:

- Set to be built by the NHPC, the Upper Siang hydropower project would entail the construction of a 300-metre high dam, the largest in the subcontinent, when completed.
- This hydropower project is being projected as a strategic imperative to counter China's hydel projects on the Tsangpo.

Environmental, and social concerns

- It may destroy the state's delicate ecosystems, wildlife habitats, and biodiversity.
- Arunachal Pradesh already hosts numerous dams, and rivers have borne the burden of hydroelectric projects for years.

Siang river

- It originates near Mount Kailash in Tibet, where it goes by the name of Tsangpo.
- It traverses more than 1,000 km eastward, before forming a horseshoe bend around the Namcha Barwa peak, and enters Arunachal Pradesh as the Siang.
- Further downstream, in Assam, the river becomes the Brahmaputra.

17. (b)

News: The Bihar government has urged the Centre to declare the Minimum Support Price (MSP) for makhana.

About (Makhana)

- It is an aquatic crop cultivated across 10 districts in the state of Bihar.
- About 85 percent of the country's makhana production comes from Bihar, where about 10 lakh people are directly or in-directly involved in its cultivation and production process.

Do You Know?

- In 2022, the government of India has awarded geographical indication (GI) tag to Bihar's 'Mithila Makhana'.

18. (a)

Statement 1 is correct: Makhana (in Hindi) Fox nut & Gorgon Nut (in English) & *Euryale ferox* (Biological name), is a high in demand **aquatic crop**, belonging to the Family of '**Nymphaeaceae**'.

- Although the crop is cultivated in **different parts of the world**, India is home to nearly **70-80%** of the global produce.

Statement 2 is not correct: Bihar boasts of over **80% of the Makhana production of the country**.

- Districts and cities including Darbhanga, Madhubani, Saharsa, Katihar, Purnea, Supaul, Kishanganj, Araria and Sitamari are major producers of Makhana.

19. (d)

What is the Finance Commission?

- The Finance Commission is a **constitutional body under Article 280**, that recommends how tax revenues collected by the Central government should be distributed among the Centre and various States in the country.
- The Commission is **reconstituted every five years** and usually takes a couple of years to make its recommendations to the Centre.
- The Centre is **not legally bound** to implement the suggestions made by the Finance Commission.

20. (c)

Statement 1 is correct: Coal Controller Organisation (CCO) is a subordinate Office of the Ministry of Coal, and Nodal Office for collection, compilation and dissemination of Coal Statistics in Government of India. It has offices in Kolkata and New Delhi, and field offices in Dhanbad, Ranchi, Bilaspur, Nagpur, Sambalpur and Kothagudem. The Kolkata office also looks after the coal mines under the NEC command area and renders assistance to Coal Controllers on various issues.

Statement 2 is correct: Functions of CCO:

- To issue directives for the purpose of declaration and maintenance of grades of coal of a seam mined in a colliery;
- To act as the appellate authority in case of dispute between consumers and owner arising out of declaration of grade of coal;
- Approval of Mining Plan and Mine Closure Plan, etc.

21. (d)

Global market

- **The global electronics market** is estimated at **US\$ 4.3 trillion**.
- The electronics GVC is intricate, with a select group of nations like **China, Taiwan, the USA, South Korea, Vietnam, Japan, Mexico, and Malaysia**.
- **China is the world's largest electronics producer**, accounting for nearly **60%** of worldwide electronics production.

India's electronics sector

- India's electronics sector reached **USD 155 billion in FY23**.
- The electronics production nearly doubled from **USD 48 billion in FY17** to **USD 101 billion in FY23**, driven primarily by mobile phones which constitute **43%** of total electronics production.
 - This comprises **USD 86 billion** in finished goods production and **USD 15 billion** in components manufacturing.
- The country's electronics export is expected to reach **\$120 Bn by FY26**.

22. (d)

Uranium (U) is a radioactive chemical element of the actinide series of the periodic table, atomic number 92.

- Uranium is a dense, hard metallic element that is silvery white in colour. It is ductile, malleable, and capable of taking a high polish.
- India produces about 2 percent of the world's uranium. India has **no significant reserves** of Uranium. All needs are met through imports. **India imports thousands of tonnes of uranium from Russia, Kazakhstan, France**.
- **Punjab is the worst-affected state** in terms of the percentage of wells found to have uranium concentration of more than 30 ppb.
- Haryana is the **second state in terms of uranium prevalence in groundwater**.
- Uranium contaminates water due to geogenic processes, overexploitation of groundwater and its decline, nitrate pollution etc.
- Uranium creates a lot of adverse impacts on health like cancer, Nephritis etc.

23. (c)

In News: Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI) are worried that the surging volumes in futures and options have started impinging on capital formation and thus pose a systemic risk to India's economic growth.

- Futures and Options are derivative contracts whose value is based on their underlying assets.
- **Futures** are agreements to buy or sell at a predetermined price and date, while options grant the right but not the obligation to buy or sell within a specified timeframe.
- **Types** of futures include commodity, currency, interest rate, and stock futures.
 - Calls and puts are the two types of options.
- F&O trading aids in risk management and facilitates leveraged trading for potential higher returns. Moreover, F&O markets are pretty transparent and liquid.

24. (c)

Both the statements are correct: Economic Survey is prepared by the **Economic Division of the Department of Economic Affairs in the Ministry of Finance.**

- It is formulated under the **supervision of the chief economic adviser.**
- The Economic Survey was first introduced in **1950-51** as part of the Budget documents.
- It was separated in the **1960s** and is now presented a day before the Union Budget.

25. (a)

World Intellectual Property Organization (WIPO)

- It is the global forum for intellectual property (IP) services, policy, information and cooperation. **Hence, Statement 1 is correct.**
- Their governing bodies and procedures are set out in the WIPO Convention, which established WIPO in 1967.
- **Mission:** To lead the development of a balanced and effective international IP system that enables innovation and creativity
- WIPO holds a **biennial** conference to frame policies, design programs and determine the organization's budget.
- More than 170 nongovernmental organizations maintain observer status in these meetings. India is a member of WIPO. **Hence, Statement 2 is not correct.**
- **Headquarters:** Geneva, Switzerland

26. (a)

Context:

- The Union Budget 2024-25 has raised taxation on income on short-term and long-term capital gains and also doubled the Securities Transaction Tax (STT) on futures & options (F&O) of securities.

About:

- Long-term capital gains (LTCG) on all financial and non-financial assets were **increased to 12.5 percent, from 10 percent.**
 - However, the exemption limit of Rs 1 lakh for LTCG on these assets has also increased to Rs 1.25 lakh.
- The rate on short-term capital gains (STCG) has been hiked to **20 per cent from 15 per cent.**

Capital Gains Tax

- It is a form of **direct tax** that is paid due to the income that is earned from the sale of assets or investments.
- Investments in farms, bonds, shares, businesses, art, and home come under capital assets.
- **Long-term gains** are levied on profits of investments held for more than a year.
- **Short-term gains** are taxed at an individual's regular income tax rate, which is higher than the tax on long-term gains.

27. (b)

Statement 1 is not correct: India is the **2nd largest** tea producer and largest black tea producer. **China** is the largest tea producing country in the world.

Statement 2 is correct: Assam grows about **55%** of the teas produced in India.

28. (b)

Statement (a) is not correct: As it doesn't focus solely on the borrower's exclusive rights to collateral.

Statement (b) is correct: It reflects the allocation of collateral and the hierarchy among various creditors in the event of a borrower's default.

Statement (c) is not correct: The terms and allocation of collateral between common lenders do not ensure equal sharing of collateral without any hierarchy. Instead, the process involves establishing a hierarchy and determining the priority of payments among various creditors. The framework outlines how collateral is distributed based on the seniority and type of debt, meaning certain creditors might have priority over others.

Statement (d) is not correct: The terms and allocation of collateral do not eliminate the need for a decision-making process among lenders. The Reserve Bank of India's Prudential Framework for Resolution of Stressed Assets Directions, 2019, emphasizes the importance of collective decision-making by requiring that any resolution plan must be agreed upon by lenders representing 75% of the total outstanding credit and 60% of the lenders by number, making it binding on all lenders.

29. (a)

Context:

- Australia banned Uranium Mining at **Jabiluka site**, which is home to one of the **world's largest deposits of high-grade uranium**.

About:

- The Jabiluka site is surrounded by **Kakadu National Park**.
- Archaeologists discovered a **buried trove of stone axes and tools** near the Jabiluka site in 2017, which they dated at tens of thousands of years old.
- The Jabiluka site became the focus of intense legal wrangling between the **Mirarr people** and mining companies after the uranium deposit was discovered there in the early 1970s.

30. (a)

What are Cooperative Banks?

- Cooperative Banks refer to those financial institutions under the Banking System in India that operate on the **principles of cooperation and mutual benefit** for their members.
- They belong to their members who are both the owners and customers of the bank.
- They operate on the principle of "**one person, one vote**" in decision-making. Along with lending, these banks also accept deposits.

Regulation of Cooperative Banks in India

- These banks in India, broadly, come under the dual control of:
 - **Reserve Bank of India:** Under the **Banking Regulation Act, 1949**, and the **Banking Laws (Application to Co-operative Societies) Act, 1965**, the RBI is responsible for regulating banking aspects of these banks, such as capital adequacy, risk control, and lending norms.
 - **Registrar of Co-operative Societies (RCS) of respective State or Central Government:** They are responsible for regulation of management-related aspects of these banks, such as incorporation, registration, management, audit, supersession of board of directors, and liquidation.

31. (c)

In News: Recently, the RBI proposed new norms that tighten the Liquidity Coverage Ratio (LCR), a critical metric for banks.

Statement 1 is correct

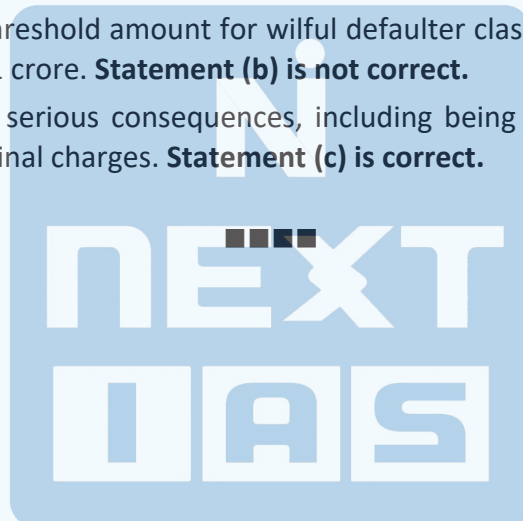
- Liquidity Coverage Ratio (LCR) measures a bank's **ability to meet short-term liquidity needs during a crisis**. It mandates that banks **hold a certain percentage of High-quality Liquid Assets (HQLA)** relative to their short-term liabilities.
- In the fourth quarter of FY24, the LCR stood at 130%. However, the proposed changes would reduce this to a range of 113% to 116% once implemented, likely from April 1, 2025.

Statement 2 is correct

- It is a measure intended to force financial institutions to set aside enough highly liquid capital to get them through the early stages of a financial crisis.
- It could **prevent the crisis** from spreading and causing greater economic harm.

32. (c)

- Wilful defaulters are borrowers who deliberately avoid repaying loans despite having the capacity to do so, so **statement (a) is not correct**.
- There is a minimum threshold amount for wilful defaulter classification, but it's currently ₹25 lakh and above, not ₹1 crore. **Statement (b) is not correct**.
- Wilful defaulters face serious consequences, including being barred from future credit and potentially facing criminal charges. **Statement (c) is correct**.



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. With reference to the Central Consumer Protection Authority (CCPA), consider the following statements:

1. The CCPA is a constitutional body established under the Indian Constitution.
2. The CCPA has the power to investigate and prosecute cases related to the violation of consumer rights.

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. Article 280 of the Indian Constitution is related to which of the following?

- (a) Centre State Relations
(b) Office of President
(c) Establishment of a Finance Commission
(d) Impeachment of Chief Justice of India

9. Consider the following statements:

1. The Emergency provisions are contained in Part XV of the Constitution.
2. The Union government has recently decided to observe the 25th of June every year as 'Samvidhaan Hatya Diwas'.

Which of the statements given above is/are correct?

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

10. Consider the following statements:

1. Absolute veto refers to the power of the President to withhold his assent to a bill passed by the Parliament.
2. The power of the President not to take any action on the bill is known as the suspensive veto.

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. Which one of the following is the *key features* of the recently introduced 'Maharashtra Special Public Security Bill, 2024'?

- (a) Naxalism in Urban Centres
(b) Strengthening Cyber Laws
(c) Reservation Against Public Employment
(d) Against New Criminal and Civil Laws

12. With reference to the Central Information Commission (CIC) in India, consider the following statements:

1. It is a constitutional body established to ensure greater access to information for Indian citizens.

- 18.** Consider the following statements with reference to Foreigners Tribunals (FTs) in India?
1. The FTs are quasi-judicial bodies formed through the Foreigners (Tribunals) Order of 1964.
 2. It has the powers of a civil court.
- Which of the statements given above is/are **not** correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 19.** Consider the following statements with reference to the Union Public Service Commission (UPSC) of India:
1. It is a constitutional body established under Part XVI of the Indian Constitution.
 2. Members of the UPSC shall hold office for a term of six years or till the age of 65 years, whichever is earlier.
- 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.** The President and the Governor of a State are granted immunity from criminal prosecution under
- (a) Article 361 of the Indian Constitution.
(b) Article 362 of the Indian Constitution.
(c) Article 363 of the Indian Constitution.
(d) Article 364 of the Indian Constitution.
- 21.** Consider the following statements:
1. The Right to Education Act (RTE), 2009 aims to provide free and compulsory education for children between 6 and 14 years of age under Article 21A.
 2. Article 21A of the Indian Constitution was inserted by the Constitution (Sixty-eighth Amendment) Act.
- Which of the statements given above is/are **not** correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 22.** Which of the following statements is **not** correct regarding the Money Bill?
- (a) A Money Bill can be introduced only in the Lok Sabha, only by a minister, and only on the recommendation of the President.
(b) If any question arises whether a Bill is a Money Bill or not, the decision of the Speaker of Lok Sabha is final.
(c) The Rajya Sabha has very restricted powers w.r.t. Money Bills.
(d) The President can return the Bill for reconsideration to the Houses of Parliament.
- 23.** Which of the following statements about Tribunals in India is/are correct?
1. Article 323A empowered Parliament to constitute administrative Tribunals both at central and state level.
 2. The Provision of Tribunals was incorporated by the 44th Amendment of the Constitution in 1976.
 3. The National Green Tribunal was established in 2010 and is a Constitutional body.

How many statements given above are correct?

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

24. Article 155 of the Indian Constitution is related to the

- (a) Appointment of Governor
(b) Special address by the Governor
(c) Power of Governor to grant pardons
(d) Council of Ministers to aid and advise Governor

25. Which of the following statements about Lok Adalat in India is correct?

- (a) Lok Adalat can only settle cases pending in courts and not pre-litigation matters.
(b) The decision of a Lok Adalat is binding on the parties and cannot be appealed.
(c) Lok Adalats are primarily established under the Arbitration and Conciliation Act, 1996.
(d) Only civil disputes can be settled in Lok Adalat, not criminal cases.

26. Consider the following statements with reference to the Law Commission of India:

1. It is a constitutional body constituted by the Government of India from time to time.
2. It functions under the Ministry of Law and Justice.

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)

Pair 1 is correctly matched.

- Under the Constitution of India, **Labour is a subject in the Concurrent List** where both the Central & State Governments are competent to enact legislation subject to certain matters being reserved for the Centre.

Pair 2 is incorrectly matched.

- Earlier, education was part of the 'State list'. However, through the 42nd constitutional amendment (1976) '**education**' was shifted from the State list to the **concurrent list**.

Pair 3 is correctly matched.

- The subject of **electricity is placed under the concurrent list** (responsibility shared between the Centre and states) of the Indian constitution.

2. (a)

Statement 1 is correct: Constitutional morality entails the **adherence to constitutional norms within a democratic system**.

- It **goes beyond the literal interpretation** to encompass a commitment to values such as sovereignty, social justice, and equality in constitutional adjudication.

Statement 2 is not correct: Though the term constitutional morality is not explicitly used in the Indian Constitution, **it is deeply embedded in several of its sections**.

3. (a)

Context: The Government has re-constituted 8 Cabinet Committees with the Prime Minister heading six of them.

Cabinet Committees

- **Mandate:** They are an organizational device to **reduce the enormous workload** of the Cabinet. They also facilitate in-depth examination of policy issues and effective coordination.
- **Membership:** They usually include only Cabinet Ministers. However, the **non-cabinet Ministers can also become members.**

4. (b)

Statement 1 is not correct: The BNS mandates bail for first-time offenders only after they have served one-third of their jail term, except in cases of death penalty or life imprisonment.

Statement 2 is correct: The BNS does introduce the provision of videography during arrests to ensure transparency and prevent any potential abuse of power by law enforcement.

5. (a)

News: Recently, Jharkhand Chief Minister Hemant Soren successfully won the floor test (also called a 'trust vote') during an Assembly session.

Floor Test

- It is a constitutional mechanism used to determine whether the incumbent government enjoys the support of the legislature.
- Under it, a Chief Minister appointed by the Governor can be asked to prove majority on the floor of the Legislative Assembly.
- It is primarily taken to know whether the executive enjoys the confidence of the legislature.
- Under **Article 175(2)**, the Governor can summon the House and call for a **floor test** to prove whether the government has the numbers.

6. (a)

Context: News agency Asian News International (ANI) has filed a defamation suit against Wikipedia in Delhi High Court for allowing allegedly defamatory content on ANI's wiki page.

What is Defamation?

- It is the act of communicating to a third party false statements about a person, place, or thing that results in damage to its reputation.
- It can be **spoken (slander) or written (libel).**
- Article 19 of the Constitution grants various freedoms to its citizens. However, Article 19(2) has imposed reasonable exemption to freedom of speech and expression granted under Article 19(1) (a). Contempt of court, defamation and incitement to an **offence** are some exceptions.
- In India, **defamation can both** be a civil wrong and a criminal offence.

7. (b)

Statement 1 is not correct: The CCPA is a statutory body established under the Consumer Protection Act, 2019, not a constitutional body.

Statement 2 is correct: The CCPA does have the authority to investigate and take legal action against violations of consumer rights. The CCPA is headed by a Chief Commissioner and includes a prescribed number of other commissioners.

8. (c)

Constitutional Provisions Related to Centre State Financial Relations:

- **Articles 202 to 206** deal with the financial administration of states, including provisions related to their budget, expenditure, borrowing, and taxation powers.
- **Articles 268 to 272** outline the distribution of revenues between the Union and the states.

- **Article 280** provides for the establishment of a Finance Commission every five years (or as specified by the President).
- **Article 282** allows the Union government to provide financial assistance to states for any public purpose.

9. (b)

News: The Union government has decided to observe the **25th of June every year** as '**Samvidhaan Hatya Diwas**'.

About:

- This day will commemorate the massive contributions of all those who endured the inhuman pains of the 1975 Emergency.

What is the criticism around the emergency imposed by Indira Gandhi?

- The Indira Gandhi-led Congress government imposed the Emergency on June 25, 1975, based on the rationale that there were imminent internal and external threats to India.
- Emergency lasted for 21-months and is considered to be one of the most controversial periods of independent India's history.
- There were reports of frequent human rights violations and the press being censored to a repressive extent.

Emergency

- The Emergency provisions are contained in **Part XVIII** of the Constitution, from Articles 352 to 360.
- Emergency is a unique feature of the Indian Constitution as it converts the federal structure into a unitary one without a formal amendment of the Constitution.

10. (a)

Statement 1 is correct.

Absolute Veto

- It refers to the power of the President to withhold his assent to a bill passed by the Parliament.
- The bill then ends and does not become an act.

Pocket Veto

- In this case, the President neither ratifies or rejects nor returns the bill, but simply keeps the bill pending for an indefinite period.
- This power of the President not to take any action (either positive or negative) on the bill is known as the pocket veto. **Hence, statement 2 is not correct.**

11. (a)

In News: Recently, Maharashtra introduced the **Maharashtra Special Public Security (MSPC) Bill, 2024**, aimed to deal with the '**increasing presence of Naxalism in urban centres**'.

What are the main provisions of the proposed law?

- The Bill gives the government the power to declare any suspect 'organisation' as an 'unlawful organisation'.
- It prescribes four offences for which an individual can be punished:
 - for being a member of an unlawful organisation;
 - when not a member, for raising funds for an unlawful organisation
 - for managing or assisting in managing an unlawful organisation and,
 - for committing an 'unlawful activity'.

12. (c)

Statement 1 is not correct: The CIC is not a constitutional body; it's a statutory body established under the Right to Information Act, 2005.

Statement 2 is correct: The CIC consists of a Chief Information Commissioner and up to ten Information Commissioners.

Statement 3 is correct: The appointment of CICs and ICs is done by the President of India on the recommendation of a committee chaired by the Prime Minister.

Statement 4 is not correct: The tenure of CICs and ICs is three years, not five.

13. (c)

Money Bill

- **Article 110** of the Constitution deals with the definition of money bills.
- It states that **a bill is deemed to be a money bill if it contains 'only' provisions dealing** with all or any of the following matters:
 - The imposition, abolition, remission, alteration or regulation of any tax;
 - the regulation of the borrowing of money or the giving of any guarantee by the Government of India, or the amendment of the law with respect to any financial obligations undertaken or to be undertaken by the Government of India;
 - The custody of the **Consolidated Fund** or the **Contingency Fund of India**, the payment of moneys into or the withdrawal of moneys from any such Fund;
 - the appropriation of moneys out of the **Consolidated Fund of India**;
 - The declaring of any expenditure to be expenditure charged on the Consolidated Fund of India or the increasing of the amount of any such expenditure;
 - The receipt of money on account of the Consolidated Fund of India or the **public account of India** or the custody or issue of such money or the audit of the accounts of the Union or of a State; or
 - Any matter incidental to any of the matters specified above.

Passing of Money Bills

- A Money Bill can be introduced only in the **Lok Sabha**, only by a minister, and only on the recommendation of the **President**.
- If any question arises whether a bill is a **Money bill** or not, the decision of the Speaker of Lok Sabha is final.
- After a Money bill is passed by the Lok Sabha, it is transmitted to the **Rajya Sabha**.
- **The Rajya Sabha has very restricted powers** w.r.t. Money Bills:
 - Rajya Sabha cannot reject or amend a Money bill.
 - Rajya Sabha can only make recommendations.
 - Rajya Sabha **must return the bill within 14 days**, with or without recommendations.
- **The Lok Sabha can either accept or reject** all or any of the recommendations of Rajya Sabha.
- If the Rajya Sabha does not return the bill within **14 days**, the bill is deemed to have been passed by both the Houses in the form originally passed by Lok Sabha.
- Once a Money Bill is passed by both the Houses, it is presented to the President.
 - He/she may either give the assent or withhold assent, but **cannot return the bill for reconsideration** by the Houses of Parliament.

14. (a)

News: The Union Government has reconstituted the NITI Aayog, increasing the number of special invitees from five to 11.

About:

- Since the term of the Aayog, barring the position of the chief executive officer, is **co-terminus** with the term of the government, the re-constitution of the Aayog was due since the formation of the new government in June.

NITI Aayog

- National Institution for Transforming India, better known as NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015.
- The government constituted NITI Aayog to replace the Planning Commission, which had been instituted in 1950.

Composition

- The Prime Minister is the chairperson of NITI Aayog.
- The **vice chairperson is appointed** by the Prime Minister.
- Four Union ministers are nominated by the Prime Minister as Ex-officio members. Special Invitees are also nominated to NITI Aayog.

15. (b)

Context:

- The Supreme Court has sought a full report from States and High Courts on the establishment and functioning of Gram Nyayalayas.

About:

- **Mandate: Gram Nyayalayas** are aimed at providing inexpensive justice to people in rural areas at their doorsteps.
- **Background:** The Gram Nyayalayas Bill was passed by the **Parliament in 2008** and the **Gram Nyayalayas Act** came into force with effect from **2nd October, 2009**.
 - **The Law Commission of India**, in its **114 th Report**, had suggested establishment of Gram Nyayalayas.
- **The Act extends** to the whole of India, except to the States of Nagaland, Arunachal Pradesh, Sikkim and some tribal areas.
- The **State Governments are responsible for establishing Gram Nyayalayas** in consultation with the respective High Courts.

16.(c)

In News: Recently, the Supreme Court of India ruled that the **states cannot make changes to the Scheduled Caste List** published under **Article 341 of the Constitution**.

Statement 1 is correct

- **Article 341 of the Indian Constitution** is a crucial provision that deals with the identification and recognition of **Scheduled Castes (SCs)**, which are historically marginalised communities that have faced **social discrimination and exclusion**.
- **Article 341** empowers the **President of India** to specify which **castes, races, or tribes** should be considered as SCs.

Statement 2 is correct

- Once the President issues such a notification (**Presidential Order**), these communities are entitled to certain protective measures and affirmative action.

- It's important to note that once this list is published, **any subsequent changes**—whether additions, deletions, or modifications—can **only be made through legislation** enacted by the Parliament.

17. (c)

Reservation by the Governor doesn't guarantee the bill will become law. The Governor has no role in deciding the bill's fate after reserving it for the President.

Under Article 200, the President has the final say on whether to grant or withhold assent to a reserved bill.

18. (d)

News: The Assam government asked the Border wing of the State's police not to forward cases of non-Muslims who entered India illegally before 2014 to the Foreigners Tribunals (FTs).

About:

- This was in keeping with the Citizenship (Amendment) Act of 2019 that provides a citizenship application window for non-Muslims — Hindus, Sikhs, Christians, Parsis, Jains, and Buddhists — who allegedly fled persecution in Afghanistan, Bangladesh, and Pakistan.

Foreigners Tribunals (FTs)

- The FTs are **quasi-judicial bodies** formed through the Foreigners (Tribunals) Order of 1964 under Section 3 of the Foreigners' Act of 1946, to let local authorities in a State refer a person suspected to be a foreigner to tribunals.
- An FT has the powers of a **civil court** in certain matters such as summoning and enforcing the attendance of any person and examining him or her on oath and requiring the production of any document.

19. (b)**News**

- Union Public Service Commission (UPSC) chairperson Manoj Soni has tendered his resignation nearly five years before the completion of his tenure.
- He became a member of the UPSC in 2017 and assumed office as chairman in May 2023.

UPSC

- The UPSC is a constitutional body, mandated under Article 315-323, **Part XIV** of the Constitution of India.
- It was established in 1926 under the Government of India Act, 1919.
- It conducts the civil services examination to select officers of the Indian Administrative Service (IAS), the Indian Foreign Service (IFS), Indian Police Service (IPS) and Central Services - Group A and Group B.
- It is headed by a Chairman and it can have a maximum of 10 members.

Appointment

- As per Article 316, the Chairman and other members of the UPSC shall be appointed by the President.
- Members of the UPSC shall hold office for a term of **six years or till the age of 65 years**, whichever is earlier.

20. (a)

News: The Supreme Court has recently agreed to examine the contours of **Article 361** of the Constitution which grants "blanket immunity" to governors from any kind of criminal prosecution.

About:

- The Bench, headed by Chief Justice of India D Y Chandrachud, was hearing a plea filed by a contractual woman employee of West Bengal Raj Bhavan, who has alleged sexual harassment by Governor C V Ananda Bose.
- **Article 361(2) states:** “No criminal proceedings whatsoever shall be instituted or continued against the **President, or the Governor of a State**, in any court during his term of office”.

21. (a)

In News: Bombay HC overturns Maharashtra govt’s exemption of private schools from RTE quota admissions to disadvantaged and economically weaker students.

Statement 1 is correct: The Right of Children to Free and Compulsory Education Act or RTE is an Act of the Parliament of India enacted on 4th August 2009. It describes the modalities of the importance of free and compulsory education for children between 6 and 14 in India under Article 21A of the Indian Constitution.

Statement 2 is not correct: The Constitution (Eighty-sixth Amendment) Act, 2002 inserted Article 21-A in the Constitution. Article 21-A and the RTE Act came into effect on 1st April 2010.

22. (d)**Passing of Money Bills**

- A Money Bill can be introduced only in the **Lok Sabha**, only by a minister, and only on the recommendation of the President.
- If any question arises whether a bill is a **Money bill** or not, the decision of the Speaker of Lok Sabha is final.
- After a Money bill is passed by the Lok Sabha, it is transmitted to the **Rajya Sabha**.
- **The Rajya Sabha has very restricted powers w.r.t. Money Bills:**
 - Rajya Sabha cannot reject or amend a Money bill.
 - Rajya Sabha can only make recommendations.
 - Rajya Sabha **must return the bill within 14 days**, with or without recommendations.
- **The Lok Sabha can either accept or reject** all or any of the recommendations of Rajya Sabha.
- If the Rajya Sabha does not return the bill within **14 days**, the bill is deemed to have been passed by both the Houses in the form originally passed by Lok Sabha.
- Once a Money Bill is passed by both the Houses, it is presented to the President.
 - He/she may either give the assent or withhold assent, but **cannot return the bill for reconsideration** to the Houses of Parliament.

23. (a)**The Tribunal System in India**

- The incorporation of tribunals into the Indian legal system can be traced back to the **42nd Amendment of the Constitution in 1976**. The Amendment introduced the term “tribunal” into the Constitution through **Articles 323A and 323B**.
- **Constitutional Provisions:**
 - **Article 323A** empowered Parliament to constitute **administrative Tribunals** (both at central and state level) for adjudication of matters related to **recruitment and conditions of service of public servants**.
 - **Article 323B** specified certain subjects (such as taxation and land reforms) for which Parliament or state legislatures may constitute tribunals by enacting a law.

- In 2010, the Supreme Court clarified that the subject matters under Article 323B are not exclusive, and legislatures are empowered to create tribunals on any subject matters under their purview as specified in the Seventh Schedule of the Constitution.
- The National Green Tribunal (NGT) was established in 2010. It is Headquartered in New Delhi. It handles the cases pertaining to environmental issues. It is a **statutory body**, established by an act of Parliament and not a Constitutional body.

24. (a)

News: President Droupadi Murmu has appointed six new governors and reshuffled three others.

About:

- **Article 155 (Appointment of Governor):** The Governor of a State shall be appointed by the President by warrant under his hand and seal.
- **Article 161:** Power of Governor to grant pardons, etc., and to suspend, remit or commute sentences in certain cases.
- **Article 163 (Council of Ministers to aid and advise Governor):** There shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor in the exercise of his functions, except in so far as he is by or under this Constitution required to exercise his functions or any of them in his discretion.
- **Article 176 (Special address by the Governor):** At the commencement of [the first session after each general election to the Legislative Assembly and at the commencement of the first session of each year], the Governor shall address the Legislative Assembly or, in the case of a State having a Legislative Council, both Houses assembled together and inform the Legislature of the causes of its summons.

25. (b)

What are Lok Adalats?

- Lok Adalat is one of the alternative dispute redressal mechanisms.
- It is a forum where **disputes/cases pending in the court of law or at pre-litigation stage** are settled/ compromised amicably.
- Lok Adalats deals with **both civil and criminal matters** as it has the same jurisdiction of the court under which it is established. However, it cannot deal with non-compoundable matters.
- **Article 39 A:** With **42nd Amendment Act of Constitution of 1976**, Article 39-A, has been inserted which requires the State to secure that the operation of the legal system:
 - Promotes justice, on a basis of equal opportunity,
 - Provide free legal aid, by suitable legislation or schemes or in any other way,
 - Ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities.
- **Legal status:** Lok Adalats have been given statutory status under the **Legal Services Authorities Act, 1987**.
- **Decision of the Lok Adalat:** Under the said Act, the award (decision) made by the Lok Adalats is deemed to be **final and binding** on all parties and **no appeal** against such an award lies before any court of law.
 - If the parties are not satisfied with the award of the Lok Adalat though there is no provision for an appeal against such an award, but they are **free to initiate litigation by approaching the court** of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate.

26. (b)

Law Commission of India

- It is a **non-statutory body** constituted by the Government of India from time to time.
- The Commission was originally constituted in 1955 and is re-constituted every three years.
- The LCI functions under the **Ministry of Law and Justice**.
- It primarily recommends reforms in existing laws, which makes its role reactive.



GEOGRAPHY

1. Consider the following statements regarding the Shyok River:

1. It originates from the Siachen Glacier and flows through the Ladakh region.
2. It is a right tributary of the Indus River.
3. The Nubra River is one of its main tributaries.
4. Shyok village, located on its bank, is strategically important due to its proximity to the India-China border.

Which of the above statements are correct?

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

2. Which among the following countries share a border with France?

- | | |
|------------|----------------|
| 1. Belgium | 2. Italy |
| 3. Germany | 4. Switzerland |

Select the correct answer using the code given below:

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

3. Which of the following countries shares borders with Paraguay ?

- | | |
|--------------|------------|
| 1. Argentina | 2. Brazil |
| 3. Chile | 4. Bolivia |

Select the correct answer using the code given below:

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

4. Recently, Sierra Leone has come up with a new law that not just bans child marriage but also penalizes people who enable such marriages.

In context of the above statement, which of the following countries shares borders with Sierra Leone?

- | | |
|------------|------------|
| 1. Guinea | 2. Liberia |
| 3. Senegal | 4. Mali |

Select the correct answer using the codes given below.

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

5. Consider the following statements:

1. Aphelion is the point of the Earth's orbit that is nearest to the Sun.
2. Perihelion is the point of the Earth's orbit that is farthest away from the Sun.

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 is correct regarding Mount Etna?

- (a) It is Europe’s largest and one of the most active volcanoes of the world.
- (b) It lies above the convergent plate margin between the African Plate and the Eurasian Plate.
- (c) It has been a UNESCO World Heritage Site since 2013.
- (d) All of the above.

7. Which of the following countries shares borders with Democratic Republic of the Congo (DRC)?

- 1. Angola
- 2. Sudan
- 3. Zambia
- 4. Rwanda
- 5. Tanzania

Select the correct answer using the code given below:

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

8. Term ‘*Apophis*’, sometimes appeared in the news, is related to:

- (a) Fish Species
- (b) Indigenous Battle Tank
- (c) Near-Earth Asteroid
- (d) Insecticides

9. With reference to sea groynes, consider the following statements:

- 1. Sea groynes are constructed parallel to the shoreline to create sheltered areas for marine life.
- 2. The primary function of sea groynes is to prevent or reduce coastal erosion.
- 3. Sea groynes can lead to sediment accumulation on the updrift side and erosion on the downdrift side.

Which of the statements given above is/are correct?

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

10. Which of the following countries shares borders with Austria ?

- 1. Germany
- 2. Slovakia
- 3. Hungary
- 4. Lichtenstein

Select the correct answer using the code given below:

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

11. Consider the following conditions:

- 1. Clear Sky
- 2. High Pressure System

Which of the above conditions is/are correct for the ‘*Heat Dome Phenomenon*’?

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

- 12.** With reference to the Siang River, which of the following statements is/are correct?
1. It originates near Mount Kailash in Tibet, where it goes by the name of Tsangpo.
 2. The river becomes the Brahmaputra in Assam.
- 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
- 13.** With reference to the 'Koyna-Warna Region' in India, consider the following:
1. Shivaji Sagar Lake is located in this region.
 2. It has recurrent seismic activity because of lying within the interior of tectonic plates.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 14.** Consider the following statements:
1. Siang River originates from the Angsi Glacier in the Kailash Range near Mansarovar Lake in Tibet.
 2. Its major tributaries are the Lohit and the Dibang.
 3. It is known as the Brahmaputra before it enters the plains of Assam.
- 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
- 15.** Consider the following statements:
1. Dhansiri River forms a natural boundary between Karbi Anglong (Assam) and Arunachal Pradesh.
 2. The main tributaries of the Tizu River are river Zunki, Lanye and Likimro.
- 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.** Tehri Hydro Power Complex is located on which of the following rivers?
- (a) Alaknanda (b) Bhagirathi
(c) Yamuna (d) Mandakini
- 17.** With reference to the Sutlej River, which of the following statements is/are correct?
1. The river rises near Lake Rakshastal, in the Tibetan Plateau.
 2. It is the westernmost tributary of the Indus River.
- 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
- 18.** Which of the following statements is/are most likely correct about the Tizu and Zungki Rivers?
- (a) They are major tributaries of the Ganges River flowing through the northern plains.
(b) They are important peninsular rivers draining into the Arabian Sea.
(c) They are part of the Brahmaputra river system in the northeast.
(d) They are perennial rivers flowing throughout the year.

- 19.** It is a country bordered by Panama and is the only American nation that is named after Christopher Columbus.
Which among the following countries is described above?
- (a) Columbia (b) Ecuador
(c) Cambodia (d) Cuba
- 20.** Consider the following statements:
1. The Seine River is the longest river flowing entirely within France.
 2. The Seine River and its banks are designated as a UNESCO World Heritage site.
- Which of the above given statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 21.** With reference to the dams in India, Consider the following pairs :
- | River | : | Dam |
|----------------------|---|---------------|
| 1. Sutlej River | : | Bhakra Dam |
| 2. Chenab River | : | Salal Dam |
| 3. Brahmaputra River | : | Dul Hasti Dam |
- 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
- 22.** With reference to the 'Chagos Islands', consider the following statements:
1. It is located at the north of the Maldives.
 2. It remains a point of contention between the United Kingdom and Mauritius.
- 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.** Recently, Ivory Coast joined the United Nations Water Convention, becoming the 10th African nation to do so.
- In context of the above statement, which of the following countries shares borders with Ivory Coast?
1. Liberia
 2. Guinea
 3. Burkina Faso
 4. Ghana
- Select the correct answer using the codes given below.
- (a) 1 and 2 only (b) 2, 3 and 4 only
(c) 2 and 3 only (d) 1, 2, 3 and 4
- 24.** Consider the following statements:
1. El Nino is characterised by warmer-than-normal sea surface temperatures in the eastern Pacific.
 2. La Nina is characterised by cooler-than-normal sea surface temperatures in the eastern Pacific.
- 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 Clarion-Clipperton Zone (CCZ) is a vast region in the Pacific Ocean primarily known for its:
- (a) Extensive coral reef systems (b) Abundance of marine mammals
(c) Deposits of polymetallic nodules (d) Rich oil and natural gas reserves
26. Rogue waves, a significant maritime hazard, are typically characterized by:
- (a) Being twice the height of surrounding waves
(b) Occurring only in deep oceans
(c) Having a predictable pattern of formation
(d) Being caused primarily by underwater earthquakes
27. Which of the following countries shares borders with Liberia ?
1. Guinea
 2. Mauritania
 3. Burkina Faso
 4. Sierra Leone
- Select the correct answer using the code given below:
- (a) 1, 2, and 4 only (b) 2 and 3 only
(c) 1 and 4 only (d) 1, 2, 3, and 4
28. Which of the following countries shares borders with Rwanda ?
1. Uganda
 2. Ethiopia
 3. Burundi
 4. Tanzania
 5. Zambia
- Select the correct answer using the code given below:
- (a) 1, 2, 3 and 5 only (b) 1, 3 and 4 only
(c) 2, 4 and 5 only (d) 3, 4 and 5 only
29. Which one of the following groups of countries comprise the 'Lithium Triangle'?
- (a) Argentina, Brazil and Chile (b) Ecuador, Brazil and Peru
(c) Argentina, Bolivia and Chile (d) Ecuador, Bolivia and Colombia
30. With reference to the Notified Disasters, which of the following statements is/are correct?
1. They are eligible for financial assistance under the Disaster Management Act, 2005.
 2. Recently the Union government has classified the heatwaves as a notified disaster.
- 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

EXPLANATIONS

1. (c)

Statement 1 is not correct: The Shyok River originates from the Rimo glacier, not the Siachen Glacier.

Statement 2 is correct: The Shyok River is a right tributary of the Indus River.

Statement 3 is correct: The Nubra River is a major tributary of the Shyok River.

Statement 4 is correct: Shyok village is strategically important due to its proximity to the Daulat Beg Oldie (DBO) military base near the India-China border.

2. (d)

France

- Its continental territory is bordered on the northeast by **Belgium** and **Luxembourg**, on the east by **Germany**, **Switzerland**, and **Italy**, on the south by the **Mediterranean Sea**, **Spain**, and **Andorra**, on the west by the **Bay of Biscay**, and on the northwest by the **English Channel**.



3. (a)

In News : Paraguay has become the 100th country to join as a full member of the International Solar Alliance.

About Paraguay

- It is a landlocked country between **Argentina**, **Brazil** and **Bolivia**.



- It is home to large swaths of swampland, subtropical forest and Chaco, wildernesses comprising savanna and scrubland.
- **The capital, Asunción**, on the banks of the Paraguay River.
- highest peak - **Cerro Pero**

4. (a)

News: Sierra Leone has come up with a new law that not just bans child marriage but also penalizes people who enable such marriages.

How widespread is child marriage in Sierra Leone?

- In 2020 UNICEF reported, there were about 800,000 girls younger than 18 in Sierra Leone who were married, which is about a third of the girls in the country.

Sierra Leone

- It is a country in West Africa, bordering **Guinea** to the north, and **Liberia** to the southeast.
- It gained independence from Britain in 1961.



5. (d)

Both the statements are not correct.

What Are Aphelion and Perihelion?

- The terms perihelion and aphelion describe different points in our planet's orbit of the Sun. This can also apply to other planets, comets, or bodies.
- **Aphelion** is the point of the Earth's orbit that is farthest away from the Sun. It always happens in early July, about two weeks after the June solstice.
- **Perihelion** is the point of the Earth's orbit that is nearest to the Sun. This always happens in early January, about two weeks after the December Solstice.
- The words come from Ancient Greek, in which helios means "Sun," apo means "far," and peri means "close."

6. (d)

Mount Etna

- It is an active stratovolcano volcano on the east coast of Sicily, the largest island in the Mediterranean Sea.
- Etna's peak is the highest in Italy south of the Alps, and it is **Europe's largest** and one of the most active volcanoes of the world.
- Its summit has five craters, which are responsible for most of the volcano's eruptions.
- It lies above the **convergent plate** margin between the African Plate and the Eurasian Plate.
- It has been a **UNESCO World Heritage Site** since 2013.

7. (d)

Democratic Republic of the Congo (DRC)

- It is a country located in Central Africa. It is the second-largest country in Africa by land area and has a diverse population with over 80 million people.
- It is the fourth most-populated nation in Africa and the eighteenth most populated country in the world.
- Kinshasa is the capital city, located on the Congo River, and is one of the largest urban areas in Africa.
- **Nine nations border the DRC: Angola, Burundi, Central African Republic, Republic of the Congo, Rwanda, Sudan, Tanzania, Uganda, and Zambia.**
- It is known for its rich natural resources, including minerals like copper, cobalt, and diamonds.

8. (c)

In News: The Indian Space Research Organization (ISRO) aims to actively participate in a ‘**Global Planetary Defence Efforts**’ ahead of **Earth’s 2029** close encounter with **Asteroid Apophis**, in a recent international workshop held in Bengaluru marked **Asteroid Day 2024**.

- **Apophis (aka 99942 Apophis)** is a **near-Earth asteroid** with a diameter of approximately 370 metres. Its trajectory brings it within 32,000 kilometres of Earth in 2029.
- While the chances of a direct impact are low, the potential consequences demand proactive measures.
- **Close Shave:** Apophis, a near-Earth asteroid, is **expected to pass by our planet** at a distance of approximately 32,000 kilometres in 2029. While this distance may seem vast in cosmic terms, it’s remarkably close by astronomical standards.

9. (b)

In News: Coastal residents in Ernakulam district, Kerala, protested against sea incursion and incomplete erection of Sea Groynes.

Statement 1 is not correct: Sea groynes are built perpendicular (not parallel) to the shoreline.

Statement 2 is correct: The main purpose of sea groynes is to trap sand and sediment, thus preventing or reducing coastal erosion.

Statement 3 is correct: Groynes can cause sediment to accumulate on the side facing the oncoming waves (updrift side) while leading to erosion on the opposite side (downdrift side).

10. (d)

In News : Prime Minister Shri. Narendra Modi paid an official visit to Austria



Austria is situated in Central Europe.

- **Capital :**Vienna
- **Border Areas :** Austria borders eight countries: **Germany**, the Czech Republic, **Slovakia**, **Hungary**, Slovenia, Italy, Switzerland and **Lichtenstein**.

11. (c)

Heat Dome Phenomenon

- A heat dome is like nature’s version of a pressure cooker lid. Imagine a high-pressure system in the atmosphere acting as that lid, trapping warm air underneath it for an extended period.
 - As a result, the **air near the surface** doesn’t get a chance to rise upward.
- **Clear Skies:** Since the **warm air doesn’t ascend**, the **sky remains clear**. Clouds typically form when rising warm air cools down and its water content condenses. But under a heat dome, the lack of upward movement means fewer clouds.
- **Intense Heating:** With the **high-pressure system** in place, more sunlight reaches the Earth’s surface. This extra solar energy leads to significant warming and drying of the soil. **Less evaporation occurs**, reducing the chances of rain cloud formation.

- **Persistent Heat:** The longer the heat dome lingers, the hotter it gets. It's like leaving a lid on a simmering pot—each day adds a little more heat.

12. (c)

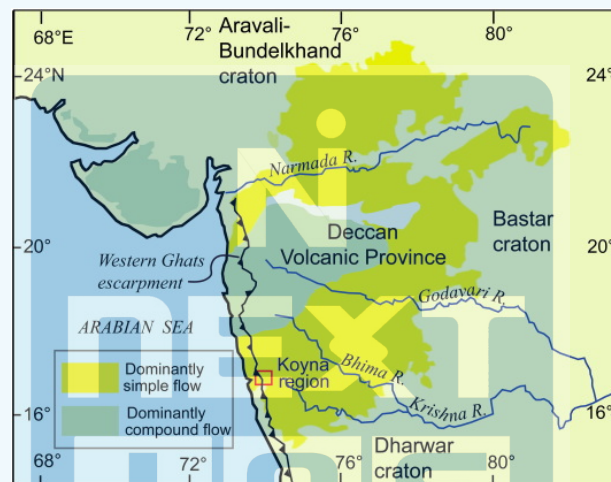
Siang River

- The Siang originates near **Mount Kailash in Tibet**, where it goes by the name of Tsangpo.
- It traverses more than **1,000 km** eastward, before forming a horseshoe bend around the **Namcha Barwa peak**, and enters **Arunachal Pradesh** as the Siang.
 - The river becomes the **Brahmaputra in Assam**.

13. (c)

In News: Recently, the **Union Ministry of Earth Science** decided scientific **deep drilling in the Koyna region** of Maharashtra, aiming for an indispensable progress in the earth sciences.

- **Statement 1 is correct** **Koyna-Warna Region** is a region nestled in the Western Ghats of Maharashtra, and has been prone to earthquakes.
- Since the impoundment of the **Shivaji Sagar Lake (better known as the Koyna Dam)** in 1962.



Statement 2 is correct

- This region has experienced **recurrent seismic activity**.
- These earthquakes are particularly intriguing because they occur within the **interior of tectonic plates**, away from the well-known plate boundaries.

14. (a)

Statement 1 is correct: The Siang River originates from the Angsi Glacier in the Kailash Range near Mansarovar Lake in the Tibet Autonomous Region of China.

Statement 2 is correct: The Lohit and Dibang Rivers are the two major tributaries of the Siang River.

Statement 3 is not correct: The Siang River becomes the Brahmaputra after it is joined by the Dibang and Lohit Rivers in the plains of Assam, south of Pasighat town.

15. (b)

Dhansiri River

- It originates from Laisang peak of Nagaland.
- Its main tributaries are Dzuza River and Diphu River.
- It forms a **natural boundary** between Karbi Anglong (Assam) and Nagaland.
- The Dhansiri Reserved Forest and Intanki National Park are two important areas which are located on each side of the Dhansiri River.

Tizu River

- It originates from the central part of Nagaland and flows into Chindwin River of Myanmar (Burma).
- The **main tributaries** of the Tizu River are river Zunki, Lanye and Likimro.

16. (b)

Tehri Hydro Power Complex is a multipurpose scheme on **river Bhagirathi**, a **tributary of river Ganges**.

- It is designed for **storing surplus water of river Bhagirathi during monsoon** and releasing the stored water to fulfil the irrigation and drinking water needs of the population in the **Gangetic plains of Uttarakhand and Uttar Pradesh** during non-monsoon period while **generating 2400 MW of peaking power**.

17. (a)**Sutlej river**

- The Sutlej river rises near **Lake Rakshastal**, which is fed by the **lake Mansrover** in the Tibetan Plateau at an elevation level (EL) of about **4,572 m**.
- It is an **antecedent river** (existed before the Himalayas) and the **easternmost tributary** of the **Indus River**.
- Sutlej River is known as **Langqen Zagbo** inside Tibet (China).
- It travels about 322 Kms inside the Tibetan Province and then enters India near **Shipkila** and further travels about 300 Kms up to **Bhakra Dam**.
- The main tributaries of Sutlej in India are **Ravi and Beas**.

18. (c)

In News: Union Ports, Shipping and Waterways Minister Sarbananda Sonowal said the Tizu-Zungki waterway project would be harnessed for economic development of Nagaland, to enable cargo and passenger transport.

Nagaland has four main rivers, namely, Doyang, Dhansiri, Dhiku and Tizu. The first three flows towards west through Assam plains to join River Brahmaputra, while Tizu River system flows towards the east and southeast and pours into the Irrawaddy in Myanmar. The Tizu River forms an important drainage system in the eastern part of Nagaland. It originates from the central part of Nagaland state and runs through a northeast direction, flows through Kiphire and Phek districts and confluences in the Chindwin River of Myanmar.

19. (a)

Columbia is a country in **northwestern South America**.

- The country is bordered by **Panama**, which divides the two bodies of water, on the northwest, by **Venezuela and Brazil** on the east, and by **Peru and Ecuador** on the south.
- It is the only American nation that is named after **Christopher Columbus**, the “discoverer” of the New World.

20. (b)

In News: Paris Mayor Anne Hidalgo took a dip in the Seine River, fulfilling a promise to show the river was clean enough to host open swimming competitions during the 2024 Olympics.

Statement 1 is not correct: Seine River is the second longest river in France. It rises on the Langres plateau and flows through Paris before emptying into the English Channel at Le Havre.

Statement 2 is correct: The Seine River is a vital waterway in France and a significant cultural heritage site. In 1991, the Seine River and its banks were designated as a UNESCO World Heritage site.

21.(b)

Bhakra Dam: Sutlej River

- **Salal Dam:** 690 MW hydroelectric power project near Reasi on **chenab river**.
- **Dul Hasti dam:** it is a 390 MW hydroelectric power plant in Kishtwar district of Jammu and Kashmir, India on the **Chenab River**.

22. (b)

In News: Recently, **India's External Affairs Minister** reaffirmed its support to **Mauritius** on the **issue of the Chagos Islands** in the Indian Ocean **against the United Kingdom**.

Statement 1 is not correct

- **Chagos Islands** consist of more than 60 islands and atolls, and are situated approximately 500 kilometres **south of the Maldives**.

Statement 2 is correct

- **Diego Garcia**, the largest island in the **Chagos Archipelago**, is pivotal. It hosts a major US military base **leased from Britain in 1966**. The base plays a strategic role in global security and defence.
- However, it remains a **point of contention between the United Kingdom, Mauritius, and the international community**.
 - **Mauritius**, which gained independence from the UK in 1968, **claims sovereignty over the Chagos Islands**.
- This dispute has persisted for over 50 years, with Mauritius seeking the return of the islands.

23. (d)

Ivory Coast joined the **United Nations Water Convention**, becoming the 10th African nation to do so.

About:

- Situated along the southern coast of west Africa, **Ivory Coast** shares borders with **Liberia, Guinea, Mali, Burkina Faso, Ghana** and has a coastline on the Gulf of Guinea.



24. (c)

In News: Multiple global weather models have forecasted a delayed emergence of La Nina — the periodic cooling of ocean surface temperature in the equatorial Pacific Ocean.

- **ENSO** is a climate phenomenon that involves changes in sea temperatures along the central and eastern tropical Pacific Ocean, coupled with fluctuations in the overlying atmosphere.

Statement 1 is correct

- **El Nino:** Characterised by warmer-than-normal sea surface temperatures in the eastern Pacific.
- During El Nino years, the Indian monsoon tends to be adversely affected, resulting in less rainfall than average.

Statement 2 is correct

- **La Nina:** Characterised by cooler-than-normal sea surface temperatures in the eastern Pacific. It affects global atmospheric circulation and, consequently, influences weather patterns worldwide.
- It tends to favour **increased rainfall** during the monsoon season in **India**, it is not absolutely essential for a successful monsoon season.

25. (c)

In News: India will apply to the UN-backed International Seabed Authority (ISA) for licences to explore for deep-sea minerals of Clarion-Clipperton Zone in the Pacific Ocean.

The Clarion-Clipperton Zone (CCZ) is primarily known for deposits of **polymetallic nodules**.

These nodules are rich in valuable metals such as manganese, nickel, cobalt, and copper, making the CCZ a significant area of interest for deep-sea mining activities.

26. (a)

Rogue waves — unusually large waves compared to ones which come before and after — pose a threat to ships, coastal and offshore infrastructure, and human lives. Rogue waves defy the average sea state, and are **twice the size of surrounding waves**, according to the US National Oceanic and Atmospheric Administration (NOAA). Such waves often form when swells — which occur not due to local winds, but distant weather systems — converge to raise a single, amplified wave. They may also form when ocean currents compress swells to create strong billows.

27. (c)

In News : Severe flooding in Liberia has led a group of senators to propose relocating the capital city away from overcrowded and poorly managed Monrovia.

- Liberia is situated on the west coast of Africa north of the equator, with **Guinea** on the north, **Sierra Leone** on the west, Côte d'Ivoire on the east and the Atlantic Ocean on the south.
- Main resources : iron ore, timber, diamonds and gold

**28. (b)**

In News : Rwanda held its fourth presidential election since the 1994 Tutsi genocide.

- President Paul Kagame won overwhelmingly with over 99% of the votes.

Rwanda

- It is a landlocked country situated in central Africa. Also known as 'The Land of a Thousand Hills', Rwanda has five volcanoes, 23 lakes and numerous rivers, some forming the source of the River Nile.

- It is bordered by **Uganda** to the north, **Tanzania** to the east, **Burundi** to the south and the Democratic Republic of Congo to the west.



29. (c)

Lithium is a chemical element with the symbol Li and **atomic number 3**. It is a soft, silvery-white alkali metal.

- Like all alkali metals, lithium is highly reactive and flammable, and must be stored in vacuum, inert atmosphere, or inert liquid such as purified kerosene or mineral oil.
- Chile, Australia, Argentina, Bolivia and China contain most of the reserves discovered so far globally.
- **Argentina, Bolivia and Chile** are known as the 'Lithium Triangle' and contain about **54%** of the world's Lithium reserves.

30. (a)

Context:

- The Union government said that there is no plan to classify the heatwaves as a notified disaster.

About:

- Once classified as a notified disaster, it will be eligible for financial assistance under the **Disaster Management Act, 2005**.
- Currently, **there are 12 categories of disasters** which are notified under this Act.
 - These are **cyclones, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, and frost and cold waves**.



GOVERNMENT SCHEMES/INITIATIVES

1. Consider the following statements about District Mineral Foundations (DMFs):
 1. DMFs are established in all districts of a state to ensure equitable distribution of funds for development.
 2. The Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) is implemented through DMFs to cater to the welfare of people and areas affected by mining.Which of the above statements is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
2. With reference to the Smart Cities Mission, which of the following statements is/are correct?
 1. It is an initiative of the Union Housing and Urban Affairs Ministry, launched in 2015.
 2. It aims to promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens.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. The 'SEHER Program', sometimes appeared in the news, primarily because of:
 - (a) Financial Literacy
 - (b) Urban Planning
 - (c) Maternity Benefit
 - (d) Climate Smart Agriculture
4. 'Project PARI' recently seen in the news, is an initiative by the
 - (a) Ministry of Power
 - (b) Ministry of Culture
 - (c) Ministry of Women & Child Development
 - (d) Ministry of Education
5. With reference to the Digital Bharat Nidhi, which of the following statements is/are correct?
 1. It was established through the Telecommunications Act, 2023.
 2. It replaces the erstwhile Universal Service Obligation Fund (USOF).Select the correct answer using the code given below:
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
6. Which of the following statements is correct regarding the 'Naavu Manujaru' programme?
 - (a) It provides farmers with investment support for agriculture and horticulture crops.
 - (b) It aims to inculcate social harmony and Constitutional values among children.
 - (c) It gives safe and conveniently located accommodation for working women.
 - (d) It focuses on protection of the rights of transgender people and their welfare.

7. Consider the following Ombudsman Scheme
1. For Banking
 2. Non-Banking Financial Companies
 3. For Digital Transactions
- How many of the above ombudsman schemes is / are a unified framework under *Integrated Ombudsman Scheme (2021)*?
- (a) Only one (b) Only two
(c) All three (d) None
8. What is the primary goal of the Asmita Project sometimes seen in the news?
- (a) To promote online education platforms
 - (b) To produce high-quality study materials in native languages
 - (c) To develop digital infrastructure in schools
 - (d) To train teachers in modern pedagogical techniques
9. Consider the following statements with reference to the Pradhan Mantri Gram Sadak Yojana (PMGSY):
1. Launched in 2000, it is a central sector scheme.
 2. The Ministry of Rural Development is the nodal ministry for this scheme.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
10. 'Mukhyamantri Yuva Karya Prashikshan Yojana' recently seen in the news is proposed by
- (a) Assam (b) Uttar Pradesh
(c) Maharashtra (d) Rajasthan
11. Which of the following is the primary objective of the KIRTI Program?
- (a) To provide financial support to established athletes.
 - (b) To streamline the entire process of grassroots talent identification of age groups between 9 - 18 years on a single platform.
 - (c) To promote international sports collaborations.
 - (d) To focus solely on urban sports development.
12. Recently, to promote environmental sustainability, which of the following state governments has mandated that all tourist vehicles entering the state must carry a large garbage bag?
- (a) Uttarakhand (b) Himachal Pradesh
(c) Kerala (d) Sikkim
13. International Centre for Audit of Local Governance (iCAL), recently seen in news, has been inaugurated in which of the following states of India?
- (a) Gujarat (b) Maharashtra
(c) Andhra Pradesh (d) Tamil Nadu
14. In the Union Budget 2024-25, a scheme named 'Vatsalya' has been proposed for minors. This scheme is related to
- (a) Education (b) Health
(c) Pension (d) None of the above

15. With reference to Ayushman Bharat Digital Mission, consider the following statements:
1. Private and public hospitals must adopt it.
 2. As it aims to achieve universal health coverage, every citizen of India should be part of it ultimately.
 3. It has seamless portability across the country.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only (b) 3 only
(c) 1 and 3 only (d) 1, 2 and 3
16. With reference to the 'NIPUN Bharat Mission', consider the following statements:
1. It is launched by the Ministry of Skill Development and Entrepreneurship.
 2. It focuses on foundational skills development for the labour force 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
17. Consider the following statements with reference to the Pradhan Mantri Schools for Rising India (PM SHRI) scheme:
1. It is a central sector scheme that aims to establish over 14,500 PM SHRI Schools.
 2. This scheme aligns with the vision of the National Education Policy 2020.
- 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)

Statement 1 is not correct: District Mineral Foundations (DMFs) are established specifically in districts affected by mining activities, not in all districts of a state. Their primary purpose is to work towards the benefit of people and areas affected by mining-related operations.

Statement 2 is correct: The Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) aims to implement various developmental and welfare projects/programs in mining-affected areas and is indeed executed through DMFs.

2. (c)

Both the statements are correct.

Smart Cities Mission

- It is an initiative of the **Union Housing and Urban Affairs Ministry**, launched in **2015**. The Mission is operated as a **Centrally Sponsored Scheme**.
- **Objective:** To promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens through the application of 'smart solutions'.
- **100 cities** have been selected to be developed as Smart Cities through a two-stage competition for five years.

3. (a)

In News: Recently, Women Entrepreneurship Platform and TransUnion CIBIL Partner launched the SEHER Program to empower women entrepreneurs.

- **SEHER Program** is a **credit education initiative** aimed at empowering women entrepreneurs in India by providing **essential financial literacy content and business skills** to women business owners.
- It facilitates better access to credit and financial resources for women-led businesses.
- It provides women entrepreneurs with knowledge about credit scores, loan eligibility, and financial planning.

4. (b)

Ministry of Culture

- Project PARI (Public Art of India), an initiative by the Ministry of Culture, Government of India, being executed by Lalit Kala Akademi and National Gallery of Modern Art seeks to bring forth public art that draws inspiration from millennia of artistic heritage (lok kala/lok sanskriti) while incorporating modern themes and techniques.
- These expressions underscore the intrinsic value that art holds in Indian society, serving as a testament to the nation's enduring commitment to creativity and artistic expression.

5. (c)

Context:

- The Department of Telecommunications (DoT) released draft rules to operationalise the **Digital Bharat Nidhi (DBN)**, by the central government at increasing telecom connectivity in rural areas.

About:

- **Digital Bharat Nidhi** was established through the **Telecommunications Act, 2023**. It **replaces the erstwhile Universal Service Obligation Fund (USOF)**.
 - **USOF** is a pool of funds generated by a 5 percent Universal Service Levy charged upon all the telecom fund operators on their **Adjusted Gross Revenue (AGR)**.
 - USOF was established in **2003**, and has been criticized for its **underutilization**.
 - Between 2017 and 2022, the government had collected Rs 41,740 crore as part of contributions made by telcos towards the USOF, and only **72 percent** of it has been utilized.
- The money would be used to fund the **expansion of telecom networks in remote and rural areas**, where private companies resist offering their services.

6. (b)

Karnataka government will start 'Naavu Manujaru' programme in schools

- It is ordered to begin from the current academic year across all government, aided, and unaided primary and high schools.
- It involves two hours of weekly discussions and dialogues (three periods of 40 minutes each). It is aimed at transforming all educational institutions into centers promoting social harmony, tolerance, and scientific temper.
 - It is Introduced to instill values enshrined in the Constitution among students.

7. (c)

In News: Recently, the **Madras High Court** upheld the Constitutional validity of the Reserve Bank of India - **Integrated Ombudsman Scheme (RBI-IOS) 2021**, and ruled that the advocates cannot represent complainants before the RBI Ombudsman.

- **Integrated Ombudsman Scheme (2021)** brings together **three previously separate ombudsman schemes** under a unified framework.

- By integrating these schemes, the **RBI aims** to simplify the process for consumers, enhance efficiency, and ensure consistent and fair resolution of complaints.

Three Schemes

- **Banking Ombudsman Scheme (2006):** Focused on addressing complaints related to banking services.
- **Ombudsman Scheme for Non-Banking Financial Companies (NBFCs) (2018):** Geared toward resolving grievances related to NBFCs.
- **Ombudsman Scheme for Digital Transactions (2019):** Specifically designed for complaints arising from digital payment services.

8. (b)

The primary goal of the Asmita (Augmenting Study Materials in Indian Languages through Translation and Academic Writing) Project is to ensure that students have access to high-quality study materials in their native languages. The initiative aims to promote multilingualism in education by producing 22,000 books in 22 scheduled languages over the next five years. The project is part of the broader effort to align with the New Education Policy, 2020, and is implemented by the University Grants Commission (UGC) and Bharatiya Bhasha Samiti (BBS).

9. (b)

News: The Centre plans to launch the fourth phase of its flagship rural road scheme, Pradhan Mantri Gram Sadak Yojana (PMGSY), to connect 50,000 habitations having populations above 250 in plain areas and 100 in special category states with all-weather roads.

Pradhan Mantri Gram Sadak Yojana (PMGSY)

- It was launched in the year 2000 with an objective of providing all-weather road connectivity to all eligible unconnected habitations in rural areas of the country.
- It is a **centrally sponsored scheme**.
- The **Ministry of Rural Development** is the nodal ministry for this scheme.

10. (c)

News: Maharashtra government has unveiled the Mukhyamantri Yuva Karya Prashikshan Yojana - a new stipend-based internship scheme for the State's unemployed youth.

About the scheme

- It aims to provide valuable internship opportunities, equip young individuals with essential skills and enhance their employability in a competitive job market.
- Candidates aged between 18 to 35 years and residing in Maharashtra are eligible to apply under the scheme.
- The scheme provides a six-month internship during which the government will extend Rs 6,000 to those who are 12th pass, Rs 8,000 to those with ITI and diploma and Rs 10,000 for those with degree and post graduation as a stipend.

11. (b)

KIRTI (Khelo India Rising Talent Identification) has been envisioned to develop an integrated talent identification architecture based on modern ICT tools and global best practices. Aimed at school children between **nine and 18 years**, the nation-wide scheme will have two main objectives: to hunt talent from every nook and corner of the country and to use sports as a tool to curb addiction towards drugs and other gadgetry distractions.

12. (d)

News: To promote environmental sustainability, the government of Sikkim has mandated that all tourist vehicles entering the state must carry a large garbage bag.

About:

- The state has previously implemented many successful programs, for **example** in 1998 it became the first Indian state to ban disposable plastic bags. In 2016, it became India's first "100 percent organic" state. Also, it holds the distinction of attaining the status of 1st Open Defecation Free State.

Sikkim

- Sikkim which became part of India in 1975 as its 22nd state is the least populous and second smallest among the Indian states.
- Despite this Sikkim is strategically very important for India as it lies very close to the Siliguri corridor (also called the 'Chicken's neck'), which, if cut in the case of war, would sever the connection between mainland India and Northeastern states.
- Sikkim borders Tibet in the north and northeast, Bhutan in the east, Nepal in the west, and West Bengal in the south.

13. (a)

Context:

- Comptroller and Auditor General (CAG) of India Girish Chandra Murmu inaugurated the **International Centre for Audit of Local Governance (iCAL) in Rajkot, Gujarat.**

About:

- The institute, a **first in the country** as per the CAG office, will function out of the office of the Accountant General (account & entitlement and Audit-1) in Rajkot and aims to set global standards for auditing local governance bodies.

International Centre for Audit of Local Governance (iCAL)

- iCAL will be a **collaborative platform for policymakers, administrators and auditors** linked with local governments.
- It will enhance the local government auditors' independence to ensure **improved financial performance assessment, service delivery, and data reporting.**
- It will also serve as a **center of excellence** for capacity building of local government auditors.

14. (c)

News

- Finance Minister Nirmala Sitharaman presented the Union Budget for a record seventh consecutive time.
- The focus of the budget is on EMPLOYMENT, SKILLING, MSMEs, and the MIDDLE CLASS.

Major Highlights of the Union Budget 2024-25

- Purvodaya Plan for the all-round development of the eastern region of India.
- Financial support for loans upto `10 lakhs will be provided to the youth for higher education in domestic institutions.
- Pradhan Mantri Janjatiya Unnat Gram Abhiyan for the socio-economic development of Tribals.
- A **new pension scheme named 'Vatsalya'** has been proposed for minors.
- A new centrally sponsored scheme was proposed, with a total outlay of Rs. 60,000 crore, that aims at skilling 20 lakh youth over a 5-year period.

- Major changes in the Income Tax slabs and Standard deduction for salaried employees increased from ₹50,000 to ₹75,000.
- The government has also proposed to abolish the 'angel tax' for all classes of investors.

15. (b)

Statement 1 is not correct: Ayushman Bharat Digital Mission will connect the digital health solutions of hospitals across the country with each other. The Mission will not only make the processes of hospitals simplified but also will increase ease of living. The Digital Ecosystem will also enable a host of other facilities like Digital Consultation, Consent of patients in letting medical practitioners access their records, etc. With the implementation of this scheme, old medical records cannot get lost as every record will be stored digitally. Participation in the Ayushman Bharat Digital Mission is voluntary for both private and public hospitals.

Statement 2 is not correct: While the mission aims for universal health coverage, it is not mandatory for every citizen to participate.

Statement 3 is correct: Seamless portability across the country is a key feature of the Ayushman Bharat Digital Mission, allowing individuals to access their health records anywhere in India.

16. (d)

In News: Recently, the union government launched the **NIPUN (National Initiative for Proficiency in Reading with Understanding and Numeracy) Bharat Mission**.

Statement 1 is not correct: NIPUN Bharat Mission is, launched by the Ministry of Education, a crucial step toward ensuring that every child in India acquires **foundational literacy** —such as reading, writing, and numeracy skills that are essential for a child's overall development and future success.

Statement 2 is not correct: The mission's primary goal is to achieve universal **Foundational Literacy and Numeracy (FLN)** among children in the **age group of 3 to 9 years**.

- By the end of **Grade 3 (approximately age 8-9)**, every child should possess the necessary competencies in reading, writing, and basic maths.

17. (b)

Context: The Punjab government has written to the Centre expressing willingness to implement the Pradhan Mantri Schools for Rising India (PM SHRI) scheme.

About:

- The PM SHRI School is a **centrally sponsored scheme** initiated by the Government of India.
- Its objective is to **establish over 14,500 PM SHRI Schools**, overseen by the Central Government, State/UT Governments, local bodies, as well as Kendriya Vidyalaya Sangathan (KVS) and Navodaya Vidyalaya Samiti (NVS).
- The goal is to offer a diverse range of learning experiences and ensure access to good physical infrastructure and appropriate resources for all students.
- The overarching purpose of PM SHRI School is to nurture students in a manner that transforms them into engaged, productive, and contributing citizens. This aligns with the vision of the **National Education Policy 2020**, striving to build a society characterized by equity, inclusivity, and pluralism.



7. With reference to the National Security Council (NSC) of India, consider the following statements:
1. The NSC is a constitutional body established under the Constitution of India.
 2. The National Security Advisor (NSA) is the head of the NSC and reports directly to the President of India.
 3. The NSC Secretariat (NSCS) is responsible for coordinating the work of the NSC and its subsidiary bodies.

Which of the statements given above is/are correct?

- (a) 1 only (b) 3 only
(c) 1 and 3 only (d) 1, 2, and 3
8. The 'Birlestik-2024' sometimes appeared in the news, is related to:
- (a) Military Exercise in Central Asian Countries
 - (b) Space Mission of Russia
 - (c) Quantum Mission of Kazakhstan
 - (d) Cognitive Test By Azerbaijan
9. Exercise 'Pitch Black', recently seen in the news, is a biennial, multi-national exercise. This exercise is hosted by which of the following countries?
- (a) USA
 - (b) France
 - (c) United Kingdom
 - (d) Australia
10. The term 'Tushil' and 'Tamal' recently seen in the news are related to
- (a) ISRO's upcoming space missions
 - (b) Minor Planets
 - (c) Indian Navy's future frigates
 - (d) Anti-tank guided missiles
11. 'Operation Vijay' recently seen in the news, is related to which of the following?
- (a) Integrate the princely state of Hyderabad.
 - (b) Recapture Indian territories occupied by Pakistani intruders.
 - (c) Secure international shipping routes against piracy.
 - (d) Eliminate Left-wing Extremism.

12. Consider the following statements, with reference to the Exercise 'Khaan Quest':
1. It was first started as a bilateral event between Indian and Mongolian Armed Forces in 2003.
 2. From 2006 onwards the exercise became a Multinational Peacekeeping Exercise.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
13. With reference to the 'Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)', consider the following statements:
1. It is a strategic initiative emerged from the Quadrilateral Group (QUAD).
 2. The Indian Navy's Information Fusion Centre in Gurugram aims to play a crucial role in extending the IPMDA's reach to the Indian Ocean Region (IOR).

Which of the statements given above is/are correct?

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

14. Consider the following statements:

1. QUAD is an informal strategic forum between India, Japan, US and Australia.
2. The idea of QUAD was first mooted by the Indian Prime Minister in 2010.
3. Exercise Malabar is an initiative of all the QUAD members.

Which of the above statement(s) is/are **not** correct?

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

EXPLANATIONS

1. (b)

General Upendra Dwivedi took over as the 30th Chief of the Army Staff (COAS) from General Manoj Pande who superannuated after more than four decades of service.

About COAS

- The Chief of the Army Staff (COAS) in India holds a pivotal role in overseeing the Indian Army.
- COAS is appointed by the the Appointments Committee of the Cabinet (ACC)

Equivalent Services Ranks of Indian Armed Forces

Indian Army	Indian Navy	Indian Airforce	Stars
Field Marshal	Admiral of the Fleet	Marshal of the Air Force	5
General	Admiral	Air Chief Marshal	4
Lieutenant General	Vice Admiral	Air Marshal	3
Major General	Rear Admiral	Air Vice Marshal	2
Brigadier	Commodore	Air Commodore	1
Colonel	Captain	Group Captain	
Lieutenant Colonel	Commander	Wing Commander	
Major	Lieutenant Commander	Squadron Leader	
Captain	Lieutenant	Flight Lieutenant	
Lieutenant	Sub-Lieutenant	Flying Officer	

2. (c)

Both the statements are correct: The Navy has **16 conventional submarines in service**. These are seven Russian Kilo-class submarines, four German-origin HDW submarines and five French Scorpene-class submarines.

- **Kalvari Class:** INS Kalvari is the first of the six Scorpene class submarines built under **Project 75**. The Submarine was commissioned in 2017.
- **Sindhughosh Class:** Sindhughosh class submarines are the **Kilo class diesel-electric submarines**. They are designated 877EKM, and were built under a contract **between Rosvooruzhenie and the Ministry of Defence (India)**.
 - The submarines have a displacement of 3,000 tonnes, a maximum diving depth of 300 meters, top speed of 18 knots, and are able to operate solo for 45 days with a crew of 53.

3. (b)

Context: India has achieved a significant milestone after successfully testing a new explosive, named **SEBEX 2**, which is 2.01 times more lethal than standard TNT (Trinitrotoluene).

About:

- Currently, the most powerful conventional explosive used in India, specifically in the Brahmos warhead, has a TNT equivalence of about 1.50.
- Most conventional warheads worldwide have a TNT equivalence ranging from 1.25 to 1.30.

Why SEBEX 2 is a game changer?

- Developed by Economic Explosives Limited (EEL) under the Make in India initiative, **SEBEX 2 is one of the most powerful non-nuclear explosives** in the world.
- It has the potential to significantly enhance the destructive power of bombs, artillery shells, and warheads without adding extra weight.
- Also, as military forces worldwide are seeking to increase the lethality of their existing weapon systems, SEBEX 2 can provide them with suitable alternatives.

4. (a)

Statement 1 is correct: Rudram-1 is an air-to-surface missile developed by DRDO for the IAF.

Statement 2 is not correct: Rudram-1 uses INS-GPS navigation and a passive homing head for guidance, not an active radar seeker.

Statement 3 is correct: The missile has a range of 250 km and can be launched from various altitudes (500 meters to 15 km).

5. (d)

News: The 16th edition of Joint Military Exercise 'Nomadic Elephant' between the armies of India and Mongolia commenced in Meghalaya (India).

Exercise NOMADIC ELEPHANT

- It is an annual training event conducted alternatively in India and Mongolia. Last edition was conducted in Mongolia in July 2023.
- It enables both sides to share their best practices in Tactics, Techniques and Procedures of conducting joint operations.
- The exercise also facilitates developing inter-operability, bonhomie and camaraderie between the two armies.

6. (d)

Context: The Indian Army plans to acquire a fleet of lightweight tanks, under 'Project Zorawar', aimed at deploying them in high-altitude regions of eastern Ladakh by 2027.

About:

- Zorawar is a lightweight tank jointly developed by the DRDO and Larsen and Toubro.
- It is named after the 19th century Dogra General Zorawar Singh, who led military expeditions to Ladakh and Western Tibet.
- The tank will be able to navigate steep mountains and cross water bodies like rivers far more easily than its forerunners such as the heavy-weight T-72 and T-90 tanks.
- This will allow it to be deployed in areas like eastern Ladakh's Pangong Tso Lake.

7. (b)

Statement 1 is not correct: The NSC is not a constitutional body; it was established by an executive order in 1998.

Statement 2 is not correct: The NSA reports directly to the Prime Minister, not the President.

Statement 3 is correct: The NSCS is responsible for the coordination and execution of tasks assigned by the NSC.

8. (a)

In News: Recently, Central Asian countries have held 'Birlestik-2024', joint drills with land, naval and air forces, for the first time without regional powers Russia and China.

- **Birlestik-2024 Exercise (aka Union 2024)** is a joint military exercise, currently underway in the **Mangistau region of Kazakhstan**, involving the armed forces of **several Central Asian countries**, aiming to **enhance cooperation, interoperability, and readiness**.
- It focuses on joint planning, tactical maneuvers, and coordination among the participating forces.
- **Participating Nations** are Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan, while **Turkmenistan is absent**.

9. (d)

Context: An Indian Air Force (IAF) contingent landed at the Royal Australian Air Force (RAAF) Base Darwin, Australia for participating in Exercise Pitch Black 2024.

Exercise 'Pitch Black'

- It is a biennial, multi-national exercise hosted by the RAAF.
- The name 'Pitch Black' was derived from the emphasis on night time flying over large unpopulated areas.
- The 2024 edition is slated to be the largest in the 43 year long history of Ex Pitch Black, which includes participation by 20 countries, with over 140 aircraft and 4400 military personnel of various air forces.
- The exercise would provide IAF with an opportunity towards force integration with participating nations and mutual exchange of best practices.
- The IAF has previously participated in the 2018 and 2022 editions of this exercise.

10. (c)

News: After a series of delays, two stealth frigates under construction in Russia for the Indian Navy are set to be delivered soon, beginning September this year.

About:

- First ship **Tushil** is ready for acceptance by the Indian Navy and is scheduled to be delivered by September 2024.
- The second ship **Tamal** is expected to be delivered by February 2025.
- In 2016, India and Russia signed an Inter-Governmental Agreement for the four stealth frigates, two directly imported and two to be manufactured by Goa Shipyard Limited (GSL). GSL is scheduled to deliver the first ship in 2026 and the second one six months later.

11. (b)

Context:

- **25 years ago** on July 26 1999, Indian armed forces successfully ousted Pakistani Forces from their occupied positions on the mountain tops of Northern Kargil District in Ladakh.
- Since then this day is celebrated as **Kargil Vijay Diwas**.

History

- In 1999, the Pakistani soldiers and militants infiltrated the Indian side of the Line of Control (LoC) in the northern Kargil district of Jammu and Kashmir, occupying strategic positions at high altitudes, to sever the link between Kashmir and Ladakh and to create unrest in the region.
- In response to this the Indian Army launched **Operation Vijay** which lasted for more than two months.

- The war, fought in the challenging high-altitude terrain of Kargil, presented numerous logistical and environmental difficulties.
- Despite these, the Indian Army not just managed to drive out Pakistani intruders but also successfully recaptured the **Tiger Hill** and other strategic positions.

12. (b)

Context:

- Indian Army contingent departed for the Multinational Military Exercise '**Khaan Quest**' at Ulaanbaatar, Mongolia.

About:

- The exercise first started as a bilateral event between **USA and Mongolian** Armed Forces in the year **2003**.
- Subsequently, from the year **2006** onwards the exercise graduated to a **Multinational Peacekeeping Exercise** with the current year being the **21st iteration**.
- Exercise KHAAN QUEST will enable the participating countries to share their best practices in Tactics, Techniques and Procedures for conduct of joint operations.
- The exercise will also facilitate developing inter-operability, bonhomie and camaraderie between soldiers of the participating countries.

13. (c)

In News: Recently, the **Foreign Ministers of the Quadrilateral Group (QUAD)** intended to expand the **Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)** into the **Indian Ocean Region**.

Statement 1 is correct

- **Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA)** is a strategic initiative, launched during the 2022 Tokyo Quad Leaders' Summit, that **emerged from the Quad**—a collaborative framework involving four democratic nations: **Australia, India, Japan, and the United States**.
- It aims to build a comprehensive maritime picture by integrating data from three critical regions—the **Pacific Islands, Southeast Asia, and the Indian Ocean Rim (IOR)**.

Statement 2 is correct

- **Initially**, the IPMDA was centred around the **Pacific Islands and Southeast Asia**. However, recent developments indicate an expansion to the **Indian Ocean region**.
- It reinforces the commitment of Quad nations to a **free, open, and secure Indo-Pacific**.
- The **Indian Navy's Information Fusion Centre in Gurugram** aims to play a crucial role in **extending the IPMDA's reach to the Indian Ocean Region (IOR)**.

14. (b)

Statement 1 is correct: QUAD is an informal strategic forum of four nations named India, Japan, US and Australia.

Statement 2 is not correct: The idea of Quad was first mooted by the Japanese Prime Minister in 2007.

Statement 3 is not correct: Malabar Exercise, initiated by India and US in 1992, now includes all QUAD members as participants. Japan joined in 2015. Australia was included as a permanent member of Ex. Malabar in 2020.



INTERNATIONAL RELATIONS

1. Consider the following statements about the International North-South Transport Corridor (INSTC):

1. The INSTC is a multimodal transport corridor that aims to connect Mumbai with St. Petersburg.
2. The INSTC is primarily a bilateral initiative between India and Russia, with limited involvement from other countries.

Which of the above statements is/are correct?

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

2. Consider the following statements with reference to Colombo Process

1. It is a Regional Consultative Process comprising 12 Member States from Asia and South America.
2. It is non-binding and decision-making is by consensus.
3. India has been a member of Colombo Process since its inception.

Which of the statements given above is/are correct?

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

3. Which of the following countries are full members of Shanghai Cooperation Organisation (SCO)?

1. Kyrgyzstan
2. India
3. Azerbaijan
4. Iran

Select the correct answer using the code given below:

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

4. The term '*Codex Alimentarius Commission (CAC)*', sometimes appeared in news, is related to:

- (a) World Trade Organization (WTO)
- (b) Food and Agriculture Organization (FAO)
- (c) International Monetary Fund (IMF)
- (d) United Nations Environment Programme (UNEP)

5. With reference to the North Atlantic Treaty Organization (NATO), which of the following statements is/are correct?

1. It was established with the signing of the Washington Treaty in 1949.
2. Its headquarter is located in Brussels, Belgium.

Select the correct answer using the code given below:

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

6. With reference to BRICS, consider the following statements:

1. The original BRIC group did not include South Africa.
2. BRICS represents over half of the world's population.
3. The New Development Bank (NDB) is a BRICS initiative.

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

7. Which among the following countries are members of the Shanghai Cooperation Organisation?

1. Kyrgyzstan
2. Azerbaijan
3. Uzbekistan
4. Mongolia

Select the correct answer using the code given below:

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

8. With reference to the Blue Line' frontier, which of the following statements is/are correct?

1. The Blue Line is a demarcation line dividing Lebanon from Israel and the Golan Heights.
2. It was marked by the United Nations in 2000

Select the correct answer using the code given below:

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

9. With reference to International Maritime Organization (IMO), consider the following statements:

1. It is a specialised agency of the United Nations responsible for regulating maritime transport.
2. IMO came into existence in 1958.

Which of the statements given above is/are correct?

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

10. With reference to the Nuclear Suppliers Group, consider the following statements:

1. It was established in 1974, this regime seeks to prevent nuclear proliferation by controlling the export of materials, equipment, and technology.
2. India is a signatory to the Nuclear Suppliers Group.

Which of the statements given above is/are correct?

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

11. With reference to the BIMSTEC, which of the following statements is/are correct?

1. It is a regional bloc comprising seven countries lying in the littoral and adjacent areas of the Bay of Bengal.
2. It is headquartered in Dhaka, Bangladesh.

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

12. With reference to the International Covenant on Civil and Political Rights (ICCPR), consider the following statements:

1. It was adopted by the UN General Assembly in 1966 and entered into force in 1976.
2. The Covenant is not legally binding.
3. India is not a signatory to the Covenant.

How many of the statements given above are correct?

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

13. 'Maastricht Treaty' is related to which of the following organisations?

- (a) The North Atlantic Treaty Organization (NATO)
(b) Group of Twenty (G20)
(c) United Nations Security Council (UNSC)
(d) European Union (EU)

14. Consider the following statements with reference to the International Court of Justice (ICJ):

1. It is the principal judicial organ of the United Nations (UN).
2. Its official languages are English and Spanish.

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. With reference to The International Court of Justice (ICJ), which of the following statements is/are correct?

1. The Court is composed of 15 judges, who are elected for terms of office of nine years.
2. The seat of the Court is in The Hague, Netherlands.

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

16. Which of the following statements is/are correct regarding the Nine-Dash Line?

1. The Nine-Dash Line is a visual representation of China's claims on Chinese official maps in the South China Sea.
2. It covers almost 90% of the South China Sea and overlaps with the Exclusive Economic Zone claims of Brunei, Indonesia, Malaysia, the Philippines, Taiwan, and Vietnam.
3. The claims by China under the Nine-Dash Line were rejected by a UN Tribunal in 2016.

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

17. Which of the following organizations has introduced the Carbon Border Adjustment Mechanism?

- (a) World Trade Organization (b) African Union
(c) European Union (d) World Bank

18. Which of the following countries are the members of Asian Disaster Preparedness Centre (ADPC)?

- | | |
|---------------|----------|
| 1. Bangladesh | 2. India |
| 3. Nepal | 4. China |

Select the correct answer using the code given below:

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

19. Which of the following countries are the members of Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)?

- | | |
|------------|-------------|
| 1. Bhutan | 2. India |
| 3. Myanmar | 4. Maldives |

Select the correct answer using the code given below:

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

EXPLANATIONS

1. (a)

Statement 1 is correct: The INSTC is indeed a multimodal transport corridor that aims to connect Mumbai with St. Petersburg, reducing transport time and costs compared to traditional routes.

Statement 2 is not correct: The INSTC is not primarily a bilateral initiative between India and Russia. It is a multilateral project involving multiple countries including Iran, Azerbaijan, and several Central Asian countries.

2. (c)

In News: India chaired its first meeting as Chair of the Colombo Process at the Permanent Representative Level Meeting in Geneva.

Statement 1 is not correct : The Colombo Process is a Regional Consultative Process comprising **12 Member States from Asia**, which primarily serve as countries of origin for migrant workers.

- It provides an important platform for consultations on the management of overseas employment and contractual labour.

Statements 2 and 3 are correct : Colombo Process is **non-binding** and decision-making is by consensus.

- It is coordinated through Permanent Missions of Member States at the UN in Geneva.'
- **India has been a member** of Colombo Process since its inception in 2003.
 - In May 2024, India assumed the chair of the Colombo Process for the first time since its inception.

3. (b)

News: The 24th Meeting of the SCO Council of Heads of State (SCO Summit) will be held under the presidency of Kazakhstan.

Which countries are members of the SCO?

- Currently, **nine countries** enjoy the status of the **SCO full members: India, Iran, Kazakhstan, China, Kyrgyzstan, Russia, Pakistan, Tajikistan and Uzbekistan.**

- Three countries — Afghanistan, Belarus, and Mongolia — have an observer status with the SCO.
- Fourteen countries — **Azerbaijan**, Armenia, Bahrain, Cambodia, Egypt, Kuwait, Maldives, Myanmar, Nepal, Qatar, Saudi Arabia, Sri Lanka, Türkiye and UAE — **have a dialogue partner status**.

4. (b)

In News: Recently, India has been unanimously elected as a member representing the Asian region in the Executive Committee of **Codex Alimentarius Commission (CAC)** during its 46th meeting being held at **FAO** Headquarters at Rome.

- The **Codex Alimentarius**, often referred to as the '**Food Code**', is a vital collection of international standards, guidelines, and codes of practice.
- It is a comprehensive set of standards, guidelines, and codes of practice related to food safety, quality, and trade.
- It covers various aspects, including food additives, contaminants, labelling, nutrition, pesticides, and more.

Origins and Purpose

- **Establishment:** The Codex Alimentarius Commission (CAC) was jointly established by the **Food and Agriculture Organization (FAO)** and the World Health Organization (WHO) in 1963.
- **Objective:** The primary objective of the CAC is to protect consumer health and promote equitable practices in food trade by developing science-based standards.

5. (c)

Both the statements are correct.

North Atlantic Treaty Organization (NATO)

- **NATO**, also called the North Atlantic Alliance, is an intergovernmental military alliance.
- **Headquarters:** Brussels, Belgium
- **Background:** It was established by 12 countries from Europe and North America with the signing of the North Atlantic Treaty (also known as **Washington Treaty**) in 1949 in Washington, D.C .
 - The objective was to provide collective security against the Soviet Union attack in the aftermath of World War II.

6. (b)

Statement 1 is correct: The original BRIC group comprised Brazil, Russia, India, and China. South Africa joined later in 2010.

Statement 2 is not correct: BRICS represents 45% of the world's population, not over half.

Statement 3 is correct: The NDB is indeed a BRICS-led initiative focused on providing financial support to projects in member and developing countries.

7. (b)

Context:

- External Affairs Minister S. Jaishankar represented India at the Shanghai Cooperation Organisation (SCO) Summit in Astana, Kazakhstan.

About:

- **Belarus joined** the Shanghai Cooperation Organization (SCO), becoming its 10th member state.
- Belarus became a dialogue partner in the **SCO in 2010** and an observer state in **2015**.

Shanghai Cooperation Organisation (SCO)

- The SCO is an intergovernmental organization **founded in 2001** with six members.
- **Objective:** To enhance regional cooperation for efforts to curb terrorism, separatism, and extremism in the Central Asian region.
- **Members:** China, Russia, India, Pakistan, Kazakhstan, **Kyrgyzstan**, Tajikistan, **Uzbekistan**, and Iran.
- **Secretariat:** Beijing
- **Official languages:** Russian and Chinese.
- **Observer status:** Afghanistan and Mongolia.
- The SCO has been an observer in the UN General Assembly since **2005**.

8. (c)

Context: The UN voiced deep concern at the increase in the intensity of exchanges of fire across the Blue Line, which separates Lebanese and Israeli armed forces.

About:

- The Blue Line is a demarcation line dividing Lebanon from Israel and the Golan Heights.
- It was marked by the **United Nations in 2000** for the purposes of determining whether Israel had fully withdrawn from Lebanon.

9. (c)

Both the statements are correct: IMO: It is a **specialised agency of the United Nations** responsible for regulating maritime transport.

- The IMO was established following agreement at a UN conference held in Geneva in **1948** and the IMO came into existence ten years later, meeting for the first time in **1958**.

10. (a)

Statement 1 is correct: Nuclear Suppliers Group: Formed in 1974, this regime seeks to prevent nuclear proliferation by controlling the export of materials, equipment, and technology that can be used to manufacture nuclear weapons.

Statement 2 is not correct: India is **not** a signatory to the Nuclear Suppliers Group.

11.(c)

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) comprises India, Bangladesh, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal.

It is a regional bloc comprising **seven countries** lying in the littoral and adjacent areas of the Bay of Bengal constituting a contiguous regional unity. It is **headquartered** in Dhaka, Bangladesh. This sub-regional organisation came into being on June 6, 1997 through the Bangkok Declaration. It constitutes five countries from South Asia (Bangladesh, Bhutan, India, Nepal and Sri Lanka) and two from Southeast Asia (Myanmar and Thailand). Initially, the economic bloc was formed with four member states with the acronym BIST-EC (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation). Following the inclusion of Myanmar on December 22, 1997 during a special ministerial meeting in Bangkok, the group was renamed BIMSTEC (Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation). Bringing together over 1.7 billion people and a combined GDP of \$3.7 trillion, the BIMSTEC has emerged as an influential engine of economic growth.

12. (a)

Statement 1 is correct: The ICCPR was adopted by the **UN General Assembly in 1966** and entered into force in **1976**.

- It is a **multilateral treaty** that **commits nations** to respect the **civil and political rights of individuals**.

Statement 2 and 3 are not correct: The Covenant is **legally binding**; the **Human Rights Committee**, established under **Article 28**, monitors its implementation.

- India became a State Party to the ICCPR in **1979**.

13. (d)

The European Union (EU) is a political and economic alliance of **27 countries**.

- **European Union (EU)**, Organization of European countries, formed in **1993** to oversee their economic and political integration.
- It was created by the **Maastricht Treaty** and ratified by all members of the European Community (EC), out of which the EU developed.

14. (a)

News: The International Court of Justice (ICJ), has said that Israel's occupation of the West Bank and East Jerusalem violated international law, and its presence in Palestinian territories should come to an end "as soon as possible".

International Court of Justice (ICJ)

- It is the **principal judicial organ** of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.
- The Court is composed of 15 judges, who are elected for terms of office of nine years by the United Nations General Assembly and the Security Council.
- Its official languages are **English and French**.

15. (c)

The International Court of Justice (ICJ)

- ICJ is the principal judicial organ of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.
- The Court is composed of 15 judges, who are elected for terms of office of nine years by the United Nations General Assembly and the Security Council.
- Its official languages are **English and French**.

16. (d)

Statement 1 is correct: The Nine-Dash Line is a visual representation of China's claims on Chinese official maps in the South China Sea.

Statement 2 is correct: The Nine-Dash Line encompasses a vast area of the South China Sea, including parts that are within the Exclusive Economic Zones (EEZs) of Brunei, Indonesia, Malaysia, the Philippines, Taiwan, and Vietnam, leading to disputes with these countries.

Statement 3 is correct: The claims by China under the Nine-Dash Line were rejected by a UN Tribunal in 2016.

- In 2016, the Permanent Court of Arbitration in The Hague ruled in favor of the Philippines in a case against China's claims. The tribunal found no legal basis for China's claims under the Nine-Dash Line, rejecting them as inconsistent with the United Nations Convention on the Law of the Sea (UNCLOS).

17. (c)

Carbon Border Adjustment Mechanism (CBAM)

- The Carbon Border Adjustment Mechanism (CBAM) is the **European Union's tool** to put a **fair price on the carbon emitted** during the production of carbon intensive goods that are entering the EU, and to encourage cleaner industrial production in non-EU countries.

18. (d)

News: Recently, India has taken over as the Chair of Asian Disaster Preparedness Centre (ADPC).

About:

- ADPC is an autonomous International Organisation for cooperation in and implementation of disaster risk reduction and building climate resilience in Asia and the Pacific region.
- **India** and eight neighbouring countries viz. **Bangladesh, Cambodia, China, Nepal, Pakistan, Philippines, Sri Lanka and Thailand** are the founding members of ADPC.

19. (a)

News: Recently, the first-ever edition of the BIMSTEC aquatic championship was held in New Delhi (India).

About BIMSTEC:

- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization that was established on 06 June 1997 with the signing of the Bangkok Declaration.
- **Members:** Bangladesh, **Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.**

SCIENCE & TECHNOLOGY

1. Individuals suffering from this medical condition take much longer time than is socially acceptable to recognise people with whom they were expected to be familiar — such as spouses, siblings, and children — while they confuse strangers with familiar people. It is known as
- (a) Kawasaki Disease (b) Prosopagnosia
(c) Huntington’s Disease (d) Parkinson’s Disease
2. With reference to the Higgs Boson, consider the following statements:
1. It is a fundamental particle associated with the Higgs field, which gives mass to other elementary particles.
 2. The Higgs Boson was discovered at the Large Hadron Collider (LHC) at CERN.
 3. The Higgs Boson is a massless particle.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 1 and 2 only
(c) 2 and 3 only (d) 1, 2 and 3
3. With reference to the Poliomyelitis (polio), consider the following statements:
1. It is a highly infectious viral disease that largely affects children under 5 years of age.
 2. The poliovirus is not eradicated in only two countries, Pakistan and Bangladesh.
- 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 LiFi (Light Fidelity) technology, consider the following statements:
1. LiFi uses radio waves to transmit data, offering higher speeds than traditional Wi-Fi.
 2. LiFi is particularly suitable for environments sensitive to electromagnetic interference.
 3. LiFi’s bandwidth capacity is significantly higher than that of Wi-Fi technologies.
- 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
5. With reference to hologram technology, consider the following statements:
1. Holograms are two-dimensional images that appear three-dimensional under specific lighting conditions.
 2. The principles of interference and diffraction are fundamental to the creation of holograms.
 3. Holograms are primarily used in the entertainment industry for creating visual effects.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

6. With reference to the African Swine Fever (ASF), which of the following statements is/are correct?
1. It is a highly contagious and fatal animal disease that infects domestic and wild pigs.
 2. It is caused by the Large DNA virus of the Asfarviridae family.
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
7. With reference to the *Thirty Meter Telescope (TMT)*, consider the following statements:
1. It is proposed to be built on Mauna Kea of Hawai'i island.
 2. India is a key partner in the TMT project.
- 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 Zika Virus consider the following statements:
1. It was first identified in Uganda in 1947.
 2. It occurs through the bite of infected *Aedes* mosquitoes, mainly *Aedes aegypti*.
- 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. Which of the following statements is/are correct about the MeDevIS platform launched by the World Health Organization (WHO)?
1. It is the world's first open access platform for medical device data.
 2. It attempts to simplify medical device naming by using a single, standardized naming scheme.
- Choose the correct answer using the rules below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
10. Consider the following statements:
1. NASA's CHAPEA Project aims to simulate a year-long mission to Mars to understand the challenges faced by astronauts on long-duration space travel.
 2. The project also supports NASA's broader goals, including the Artemis program.
- 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. Tirzepatide was seen in the news is primarily known as:
- (a) Artificial Sweetener (b) Nano Fertilizer
(c) Antidiabetic Drug (d) Dye
12. Which of the following statements is correct regarding the electroencephalography (EEG) test?
- (a) It can be used to help diagnose and monitor a number of conditions affecting the brain.
(b) It is one of the main tests to help diagnose epilepsy.
(c) It can reveal the effects of anaesthesia and sleeping patterns.
(d) All of the above.

- 13.** With reference to the Chandipura vesiculovirus (CHPV), consider the following statements:
1. It is an RNA virus belonging to the Rhabdoviridae family, which also includes the rabies virus.
 2. It was first identified in 1965 in Chandipura, a village in Maharashtra.
 3. It occurs by the sting of a vector-infected species of sandfly.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
- 14.** With reference to Nuclear fusion, which of the following statements is/are correct?
1. It is a process in which two light atomic nuclei combine to form a heavier nucleus.
 2. The process is the source which powers stars, including the sun.
- 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
- 15.** With reference to the Primary Amoebic Meningoencephalitis (PAM), consider the following statements:
1. It is a rare but lethal central nervous system infection.
 2. It is usually caused by an infection with *Naegleria fowleri*, a microscopic amoeba commonly called a brain-eating amoeba.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 16.** Consider the following statements:
- Statement I: Graphite is a soft material due to weak van der Waals forces between its layers.
- Statement II: The use of graphite in nuclear reactors is primarily due to its excellent heat-resistant properties.
- Which of the above given statements is/are correct?
- (a) Both statements are correct.
(b) Both statements are incorrect.
(c) Statement I is correct, but Statement II is incorrect.
(d) Statement II is correct, but Statement I is incorrect.
- 17.** The term 'Tinzaparin' was recently seen in the news. It is a drug commonly used to
- (a) Reduce Obesity
(b) Prevent Blood Clots
(c) Treat Malaria
(d) Treat Depression
- 18.** With reference to Tuberculosis (TB), which of the following statements is/are correct?
1. The disease is caused by a bacteria called *Mycobacterium tuberculosis*.
 2. It spreads through the air when infected people cough, sneeze or spit.
- 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. Which of the following statements is **not** correct regarding Mpox (monkeypox)?
- It was first discovered in Denmark in 1958.
 - It doesn't spread from person-to-person.
 - It can cause a painful rash, enlarged lymph nodes and fever.
 - None of the above.
20. Ketamine, a drug traditionally used as an anesthetic, has shown potential as a treatment for:
- Chronic pain syndromes
 - Schizophrenia
 - Treatment-resistant depression
 - Alzheimer's disease
21. Terms like '*Ketamine, Esketamine and or Ketalar*', sometimes appeared in the news, is in the context of:
- Tuberculosis
 - Anti-depression
 - Malaria
 - Encephalitis
22. Recently, the outbreaks of *listeria* which can contaminate food, have been appeared sometimes in news, is caused by:
- Bacteria
 - Virus
 - Protozoa
 - Fungi
23. With reference to the NISAR satellite, which of the following statements is/are correct?
- It is Jointly developed by the National Aeronautics and Space Administration (NASA) and the Indian Space Research Organisation (ISRO).
 - It will be launched into a polar Sun-synchronous dawn-dusk orbit.
- Select the correct answer using the code given below:
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
24. GROWTH-India telescope is primarily used for:
- Studying distant galaxies
 - Observing the Sun
 - Studying celestial transient events
 - Analyzing black holes
25. NASA's Perseverance rover recently found a Cheyava Falls on which of the following?
- Jupiter
 - Venus
 - Mars
 - Saturn
26. Which of the following statements is/are correct regarding pumped storage plants?
- Pumped storage plants use the principle of gravity to generate electricity.
 - The system involves two water reservoirs at different elevations, which generate power when water moves from the higher reservoir to the lower one through a turbine.
 - Power is also required to pump water back into the upper reservoir.
- Select the correct answer using the codes given below:
- 1 and 2 only
 - 2 and 3 only
 - 1 and 3 only
 - 1, 2, and 3

27. With reference to the 'Chandipura Virus (CHPV)', consider the following statements:
1. It is a member of the Rhabdoviridae family known to cause outbreaks during the monsoon season.
 2. It is transmitted by vectors such as sand flies and ticks.
 3. It affects mostly children under 15 years of age
- 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

EXPLANATIONS

1. (b)

Context: According to research published in the journal Genetics, when MCTP2 gene is mutated the ability to recognise faces is severely impaired.

What is Prosopagnosia?

- Prosopagnosia is one form of visual agnosia, or inability to identify everyday items just by looking at them.
- Individuals carrying the mutant gene take much longer time than is socially acceptable to recognise people with whom they were expected to be familiar — such as spouses, siblings, and children — while they confuse strangers with familiar people.
- Its prevalence worldwide is estimated to be 1.8-2.9% in the general population.

Causes

- Brain injury.
- Genetic or developmental abnormalities.

Treatment

- Prosopagnosia is usually permanent, and recoveries aren't common.

2. (b)

Statement 1 is correct: The Higgs Boson is indeed a fundamental particle associated with the Higgs field, which is responsible for giving mass to other elementary particles through the Higgs mechanism.

Statement 2 is correct: The Higgs Boson was discovered in 2012 at the Large Hadron Collider (LHC) at CERN.

Statement 3 is not correct: The Higgs Boson itself has mass; it is not massless. Its mass is about 125 gigaelectronvolts (GeV).

3. (a)

Statement 1 is correct: The WHO's Global Polio Eradication Initiative is set to miss its deadline of eradicating polio by the end of 2024.

- **Poliomyelitis (polio)** is a highly infectious viral disease that largely affects children under 5 years of age.

Statement 2 is not correct: Of the 3 strains of wild poliovirus (type 1, type 2 and type 3), wild poliovirus type 2 was eradicated in 1999 and wild poliovirus type 3 was eradicated in 2020.

- Endemic wild poliovirus type 1 remains in two countries: Pakistan and Afghanistan.

4. (b)

Statement 1 is not correct: LiFi (Light Fidelity) uses light waves (visible light, infrared, and ultraviolet) to transmit data, not radio waves.

Statement 2 is correct: LiFi is particularly suitable for environments that are sensitive to electromagnetic interference because it uses light waves instead of radio waves, which makes it ideal for use in places like hospitals, aircraft cabins, and nuclear power plants.

Statement 3 is correct: LiFi has a significantly higher bandwidth capacity compared to Wi-Fi technologies because the visible light spectrum is much broader than the radio frequency spectrum used by Wi-Fi.

5. (a)

Statement 1 is not correct: Holograms are photographic patterns that appear three-dimensional, not two-dimensional images.

Statement 2 is correct: Holograms are created by recording the interference pattern of light waves, and the three-dimensional image is reconstructed through diffraction.

Statement 3 is not correct: While holograms have applications in entertainment, they are also widely used in security (e.g., banknotes, credit cards), medical imaging, and other fields.

6. (c)

Context:

African Swine Fever (ASF)

- It is a highly **contagious and fatal animal disease** that infects domestic and wild pigs.
- It is caused by the **Large DNA virus of the Asfarviridae family**.
- **Distribution:** First detected in Kenya in 1909 & currently found in Asia, Europe & Africa.
- **Symptoms:** Includes weight loss, intermittent fever, respiratory signs, chronic skin ulcers & arthritis. Acute forms characterized by anorexia, loss of appetite & hemorrhages in skin.
- **Transmission:** Through natural hosts (warthogs, bushpigs & ticks) acting as vectors & by direct/indirect contact with infected pigs, their feces & body fluids.
- **Vaccination:** Currently, there is **no effective vaccine** available against ASF. However, in 2023, **Vietnam** approved two African Swine Fever (ASF) vaccines for domestic sale.
- **Public Health Risk:** It is not a threat to human health as it is a non-zoonotic disease.

7. (c)

In News: Recently, Indian scientists developed **an open-source tool** to generate infrared star catalogue for **Thirty Meter Telescope**.

- **Thirty Meter Telescope (TMT)** is a groundbreaking international scientific project that aims to revolutionise our understanding of the universe. It will be the world's most advanced ground-based optical, near-infrared, and mid-infrared observatory.

Statement 1 is correct

- The TMT is proposed to be **built on Mauna Kea**, an iconic site on the **island of Hawai'i**.
 - Mauna Kea's **high altitude** and clear skies make it an **ideal location** for astronomical observations.

Statement 2 is correct

- Its **segmented mirror technology**, **adaptive optics**, and **precise control systems** will enable unprecedented observations of **distant galaxies, exoplanets, and cosmic phenomena**.
- **India** is a key partner in the TMT project, with India TMT Center at **Indian Institute of Astrophysics (IIA)** leading the national collaboration.

8. (c)

Both the statements are correct: ZIKA virus is an **Arbovirus** belonging to the **Flaviviridae Family**. It is a single stranded, Positive sense RNA virus.

- It is a **mosquito-borne virus** first identified in **Uganda in 1947** in a Rhesus macaque monkey, and was found in humans in African countries in the **1950s**.
- It occurs through the bite of **infected Aedes mosquitoes**, mainly *Aedes aegypti*, which also transmits dengue and chikungunya.
 - The *Aedes* mosquitoes usually bite during the day.

9. (a)

Statement 1 is correct: MeDevS is the first such open access global portal for medical device data.

Statement 2 is not correct: MeDevS doesn't create a single name system. Instead, it refers to two existing international protocols (EMDN and GMDN) to help harmonize and clarify the use of machine names. EMDN (used mainly in Europe) and GMDN (used in Australia, Canada, USA, and other countries).

10. (c)

Statement 1 is correct: CHAPEA's primary objective is to simulate a Mars mission on Earth to study the physical and behavioral effects on astronauts during long-duration space travel.

Statement 2 is correct: The project also supports NASA's broader goals, including the Artemis program, aimed at establishing a long-term presence on the Moon as a stepping stone to Mars. By simulating Martian conditions, CHAPEA helps researchers develop strategies to maintain crew health, ensure resource sustainability, and manage isolation and communication delays, all of which are critical for the success of manned missions to Mars.

11. (c)

Recently, an expert committee of India's drug regulator approved the **drug Tirzepatide**.

About:

- In 2017, the US Food and Drugs Administration (FDA) approved **Ozempic**, with the active ingredient **semaglutide**, to manage type 2 diabetes. Soon, doctors saw an interesting side-effect — **weight loss**.
- In November 2023, Eli Lilly, another US pharma major, got FDA approval for the drug **Zepbound to treat obesity**. **Zepbound contain tirzepatide** as the active ingredient.
- The FDA has approved **semaglutide and tirzepatide for chronic weight management** in adults. These drugs can be prescribed to those who are obese (with a body mass index of over 30), or overweight (with a BMI between 27 and 30), and have at least one other health condition related to their weight (such as high blood pressure, high cholesterol, or type 2 diabetes).

12. (d)

News: The year 2024, marks the 100 years of the first human electroencephalography (EEG), produced by German physiologist Hans Berger.

What is EEG?

- It is a process of recording the electrical activity of the brain.
- Human brain consists of billions of neurons, which performs various functions by moving electrically charged particles such as ions.
- The movement of these particles gives rise to electrical activity that can be used by medical professionals for the EEG test.

Applications

- It can be used to help diagnose and monitor a number of conditions affecting the brain.
- The EEG test is one of the main tests to help diagnose epilepsy.
- It can also reveal the effects of anaesthesia, sleeping patterns, and neurological activity during a coma.
- EEG can also help confirm brain death, one of the two legally recognised forms of death in India.

13. (c)

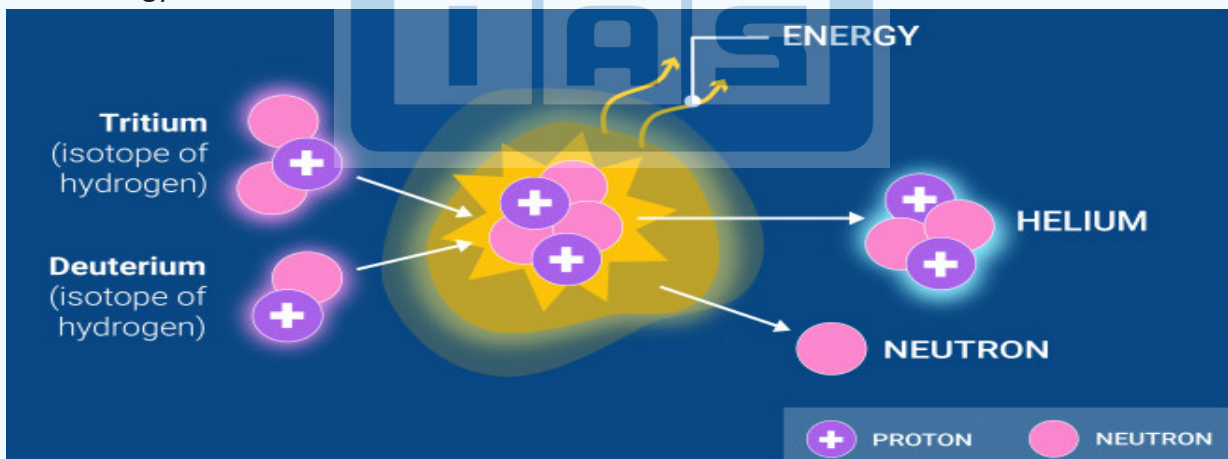
Chandipura virus, aka **Chandipura vesiculovirus (CHPV)**, is an **RNA virus** belonging to the **Rhabdoviridae family**, which also includes the rabies virus.

- It was first identified in **1965 in Chandipura**, a village in **Maharashtra**.
- **Spread:** It occurs by the sting of a **vector-infected species of sandflies** like Phlebotomine sandflies and Phlebotomus papatasi, and some mosquito species such as Aedes aegypti (which is also the vector for dengue).
 - The virus resides in the salivary gland of these insects, and can be transmitted to humans or other vertebrates like domestic animals through bites.

14. (c)

Nuclear fusion

- It is a process in which **two light atomic nuclei combine to form a heavier nucleus**, releasing a significant amount of energy in the process.
 - This process is the same as what powers stars, including our sun.
- The most common fusion reaction involves the isotopes of hydrogen: **deuterium and tritium**.
- When these isotopes fuse, they form helium and release a neutron, along with a large amount of energy.



15. (c)

Both the statements are correct: Primary amoebic meningoencephalitis (PAM) is a **rare but lethal central nervous system infection** of rapid fatality caused by **free-living amoebae** found in **freshwater, lakes, and rivers (never in seawater)**.

- **Cause:** It is usually caused by an infection with **Naegleria fowleri**, a microscopic amoeba commonly called a **“brain-eating amoeba.”**
 - The amoeba enters through the **nasal channels** and destroys brain tissue, causing **severe brain swelling and death in most cases**.
 - This disease occurs more often during the **warmer months** of the year.

- Patients with PAM typically have a history of swimming, diving, bathing, or playing in warm, generally stagnant, freshwater during the previous one to 9 days.

16. (c)

Statement I is correct: The layers of graphite are held together by weak van der Waals forces, allowing them to slide over each other easily, which makes graphite soft and slippery.

Statement II is not correct: The primary reason graphite is used in nuclear reactors is because of its ability to act as a neutron moderator, slowing down neutrons to sustain the nuclear chain reaction, rather than its heat-resistant properties.

17. (b)

News: Recently, researchers have found that **tinzaparin**, a drug commonly used to **prevent blood clots**, significantly reduced damage to human cells caused by spitting cobra venom.

About:

- They also found the drug reduced skin damage in mice injected with the venom; the scientists have filed for a patent and may start human clinical trials soon.

Do you know?

- Venomous snakes kill about 1.4 lakh people every year, especially in Africa and Asia.
- Despite this, treatment for snakebites has remained archaic and is still based on the work of French scientists in the late 1800s.

18. (c)

What is Tuberculosis?

- Tuberculosis (TB) is an **infectious disease** that most often affects the lungs and is caused by the **bacteria *Mycobacterium tuberculosis***.
- It spreads through the air when infected people **cough, sneeze or spit**.
- **TB can manifest in two forms:** Latent TB infection and active TB disease.
 - In latent TB infection, the bacteria are present in the body, but the immune system keeps them in check, and the person does not exhibit symptoms.
 - However, the bacteria can become active later, leading to active TB disease, which is characterized by symptoms such as persistent cough, chest pain, weight loss, fatigue, and fever.
- **Symptoms:** prolonged cough (sometimes with blood), chest pain, weakness, fatigue, weight loss, fever, night sweats.
 - The symptoms people get depend on where in the body TB becomes active. While TB usually affects the lungs, it also affects the kidneys, brain, spine and skin.

19. (b)

News: Children are at risk as a new **mpox variant** has hit the Congo displacement camps.

About:

- Mpox (monkeypox) is an infectious disease caused by the monkeypox virus. It can cause a **painful rash, enlarged lymph nodes and fever**. Most people fully recover, but some get very sick.
- The monkeypox virus was discovered in **Denmark (1958)** in monkeys kept for research and the first reported human case of mpox was a nine-month-old boy in the Democratic Republic of the Congo (DRC, 1970).
- Mpox **spreads from person-to-person** through close contact with someone who is infected with the monkeypox virus.

20. (c)

In News: Recently, researchers have found a new tablet that slowly releases the drug ketamine that can ease treatment-resistant depression in a clinical trial.

About Ketamine

- It is often associated with **its recreational use as a 'party drug'** that has emerged as an unexpected ally in the **battle against depression**.
- Originally used **as an anaesthetic**, researchers discovered that ketamine had rapid **antidepressant effects**, often within hours.
- It works by **blocking a receptor** for an excitatory **neurotransmitter** called **glutamate**.
 - Glutamate, a neurotransmitter, plays a crucial role in neuronal communication.

21. (b)

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 - Glutamate, a neurotransmitter, plays a crucial role in neuronal communication.

Beyond the Pill

- **Esketamine:** It is a derivative of ketamine that is administered as a nasal spray called **Spravato**.
- **Injected Ketamine:** **Ketalar** is a form of ketamine, can be **prescribed off-label**.
 - Both esketamine and injected ketamine act as fast-acting lifelines for treatment-resistant depression.

22. (a)

In News: Recently, two separate outbreaks of **listeria**, a **bacteria** which can contaminate food, have been reported in the United States and Canada.

- **Listeria (Scientifically Listeria Monocytogenes)** is a **bacterium** that can **contaminate food** and cause a serious infection called **listeriosis**. It spreads easily among **deli equipment** (a store where ready-to-eat food products), surfaces, hands and food.
- Symptoms of listeriosis include vomiting, nausea, cramps, severe headache, constipation, and fever.
- Foods that often harbour listeria include milk, raw sprouts, deli meats, hot dogs, soft cheeses, and smoked seafood.

23. (c)

NISAR Satellite

- NISAR is an Earth-observation satellite that stands for **(NASA-ISRO Synthetic Aperture Radar)**.
- It is Jointly developed by the **National Aeronautics and Space Administration (NASA)** and the **Indian Space Research Organisation** under a partnership agreement signed in **2014**.
- It will be launched into a **polar Sun-synchronous dawn-dusk orbit**.

Objectives of the Mission

- NISAR can **measure tectonic plate movements** accurately. So a lot of geological, agricultural and water-related observations can be obtained from this satellite.

- It can study the **water-stressing, climate change-related issues, agricultural changes through patterns, yield, desertification and continental movements** precisely with respect to annual water cycle movements.
- NISAR's data can help people worldwide **better manage natural resources and hazards**, as well as providing information for scientists to better understand the effects and pace of climate change.

24. (c)

India's GROWTH-India telescope in Ladakh captured images of a 116-metre, building-sized asteroid during its closest approach to Earth.

India's inaugural fully automated optical telescope for research is situated at the Indian Astronomical Observatory in Hanle, Ladakh. A collaborative venture between the Indian Institute of Astrophysics in Bengaluru and IIT Bombay, it was established with financial backing from the Indo-US Science and Technology Forum and India's Science and Engineering Research Board. As part of the global GROWTH network, its primary mission is to observe and gather data on **transient celestial occurrences**.

25. (c)

NASA's Perseverance rover found a rock named Cheyava Falls on **Mars**

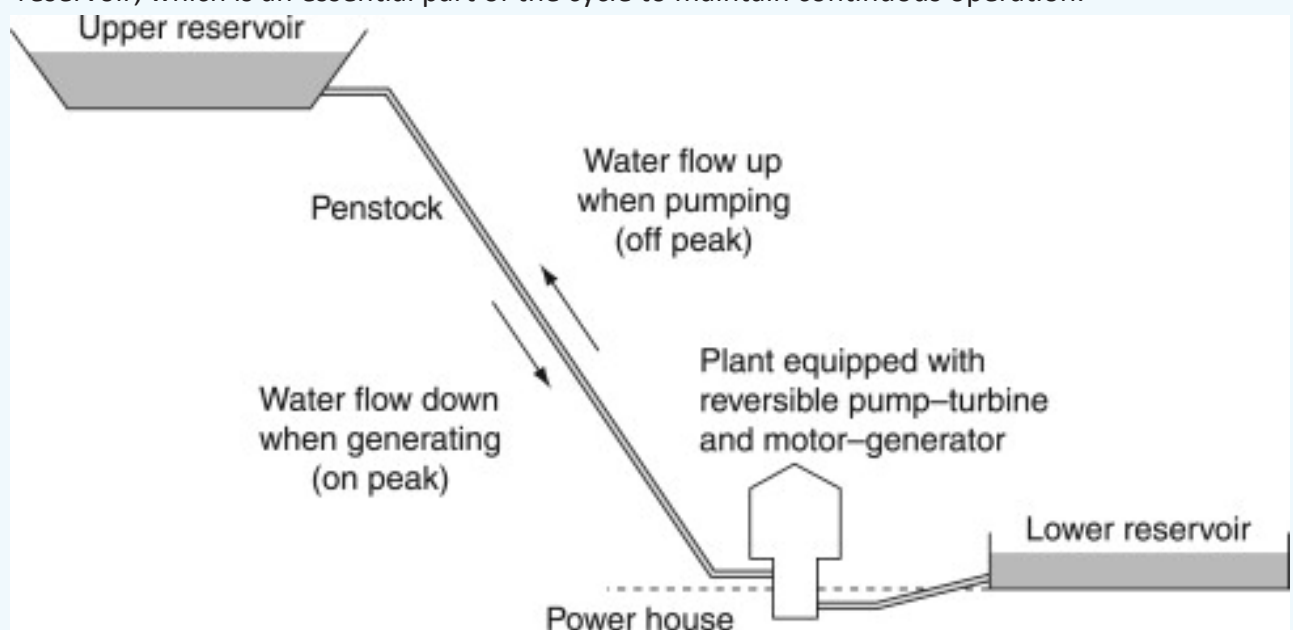
- Cheyava Falls measures 3.2 feet by 2 feet (1 metre by 0.6 metres).
- It is named after a waterfall in the Grand Canyon.
- It is situated at the northern edge of Neretva Vallis, an ancient river valley that is 400 metres wide, formed by ancient water flow into Jezero Crater.
- It shows signs of organic material and evidence of past water flow.

26. (d)

Statement 1 is correct: Pumped storage plants do use the principle of gravity to generate electricity by utilizing the potential energy of water stored at a higher elevation.

Statement 2 is correct: This describes the basic operation of a pumped storage plant where water flows from an upper reservoir to a lower reservoir, passing through a turbine to generate electricity.

Statement 3 is correct: The system does require power to pump the water back into the upper reservoir, which is an essential part of the cycle to maintain continuous operation.



27. (d)

In News: The Ministry of Health reviewed the situation in Gujarat, Rajasthan and Madhya Pradesh after the States reported cases of **Chandipura virus and Acute Encephalitis Syndrome (AES)**.

Statements 1,2 and 3 are correct : **Chandipura Virus (CHPV)** is a member of the **Rhabdoviridae family** known to cause sporadic cases and outbreaks in western, central, and southern parts of the Country, especially during the **monsoon season**.

- It is transmitted by vectors such as **sand flies and ticks and it affects mostly children under 15 years of age**
- It can be present with a febrile illness that may in some cases result in death.
- There is currently no specific antiviral treatment or vaccine for the Chandipura virus. Early diagnosis and supportive treatment are crucial.

■■■■



ENVIRONMENT & ECOLOGY

1. Recently, scientists have found the first evidence of an insect crossing the entire Atlantic ocean, completing a journey of 4,200 kilometers. It is;
- (a) Dragonfly (b) Locust
(c) Beetle (d) Butterfly
2. With reference to the Great Indian Bustard, consider the following statements:
1. Its population is confined mostly to Maharashtra and Karnataka.
 2. It is listed as Critically 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
3. With reference to the Sustainable Development Goals (SDGs), consider the following statements:
1. It was adopted during the 70th session of the United Nations General Assembly in 2015.
 2. The SDGs are universal, applying to all nations—developed, developing and least developed countries.
 3. The SDGs are legally binding, but they have effectively become international obligations.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
4. With reference to the Megafauna, consider the following statements:
1. Megafauna term is generally used to describe animals weighing more than 50 kg.
 2. Ostriches are classified as the mega carnivores.
- 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 water hyacinth, consider the following statements:
1. It is a fast-growing aquatic plant native to India.
 2. It is also known as the terror of Bengal.
- 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 is related to 'Syntrichia caninervis'?
- (a) Plants (b) Animal
(c) Bird (d) Virus

7. With reference to palm trees, consider the following statements:
1. Palm trees are exclusively found in tropical rainforests.
 2. Palm oil, a widely used vegetable oil, is derived from the fruit of the coconut palm, which is cultivated across tropical regions for its commercial value.
- 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 countries has recently announced an action plan to eliminate Indian house crow (*Corvus splendens*) due to their growing menace?
- (a) Yemen (b) Kenya
(c) Singapore (d) New Zealand
9. With reference to the Kaziranga National Park, which of the following statements is/are correct?
1. It was recognized as a UNESCO World Heritage Site in 1985.
 2. The Park is home for around 70% of One Horned Rhinoceros in the world.
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
10. With reference to the Gharial, which of the following statements is/are correct?
1. The Gharial derives its name from a bulbous knob-like protuberance on the snout of breeding males.
 2. They are found mainly in the Chambal and Gandak rivers.
- 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. Consider the following statements
1. Pearl Spot is a euryhaline species that inhabits mainly brackish water and river mouths.
 2. Pearl Spot is distributed in the coastal regions of peninsular India and Sri Lanka.
 3. The IUCN Red List of Threatened species classifies Pearl Spot as Least Concern.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2, and 3
12. With reference to the Groynes, which of the following statements is/are correct?
1. It is a rigid hydraulic structure built perpendicularly from an ocean shore to limit the movement of sediment.
 2. They reduce the need for the beach to be maintained through beach nourishment and the recycling of sand.
- 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

- 13.** 'Sustainable Development Goal 14' was recently seen in the news. It is related to
- (a) Climate Action (b) Life Below Water
(c) Life on Land (d) Peace, Justice and Strong Institutions
- 14.** With reference to the Man and Biosphere (MAB) Programme and Biosphere Reserves in India, consider the following statements:
1. The MAB Programme is an initiative of the United Nations Environment Programme (UNEP) aimed at promoting sustainable development through the conservation of biological diversity.
 2. India has the highest number of biosphere reserves recognized under the MAB Programme globally.
 3. All biosphere reserves in India are automatically included in the World Network of Biosphere Reserves under UNESCO.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 1 and 2 only
(c) 2 and 3 only (d) 1, 2 and 3
- 15.** With reference to Pangong Tso, consider the following statements:
1. It is a freshwater lake located in the Himalayan region.
 2. It is designated as a Ramsar site due to its ecological importance.
- 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.** With reference to the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement, which of the following statements is/are correct?
1. It is an international treaty under the United Nations Convention on the Law of the Sea (UNCLOS).
 2. It sets precise mechanisms for the sustainable use of marine biological diversity.
- 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
- 17.** With reference to the United Nations Convention on the Law of the Sea (UNCLOS), consider the following statements:
1. UNCLOS provides a comprehensive legal framework for all human activities in the oceans and seas.
 2. It divides marine areas into five distinct zones, including the Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ), Continental Shelf, and the High Seas.
 3. UNCLOS establishes the rights and responsibilities of nations regarding the use of the world's oceans, including navigation, exploitation of resources, and environmental protection.
- 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. Consider the following pairs

Species In News	IUCN Red List status
1. Bornean elephant	Critically Endangered
2. Painted lady butterflies	Least Concern
3. Indian star tortoises	Near Threatened

How many of the above pairs are correctly matched?

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

19. Consider the following statements with reference to Pearl Spot

- It is a euryhaline species that inhabits mainly brackish water and river mouths.
- It is listed as critically 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

20. With reference to the FishMIP (Fisheries and Marine Ecosystem Model Intercomparison Project), consider the following statements:

- It is an initiative of the United Nations Environment Programme (UNEP).
- Its objective is to assess the impact of overfishing on marine biodiversity.

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. Which of the following species is related to “the Squalus hima” ?

- (a) Butterfly (b) Snake
(c) Dogfish shark (d) Chimpanzee

22. Consider the following statements about Sarus Crane:

- It is the tallest flying bird in the world and is found only in the Indian subcontinent.
- It is classified as “Critically Endangered” on the IUCN Red List.

Which of the statements given above is/are correct?

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

23. With reference to the impact of air pollution on insects, consider the following statements:

- Air pollution disproportionately affects beneficial insects such as bees and wasps more than crop-destroying pests.
- Ozone and nitrogen oxides are among the most harmful air pollutants for insects.

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

24. Which of the following statements accurately describes the unique characteristic of Wolbachia bacteria that enables them to manipulate their insect hosts’ reproduction?

- (a) They produce toxins that specifically target male embryos, leading to a female-biased sex ratio.

- (b) They induce hormonal changes in infected females, causing them to lay only female eggs.
- (c) They are primarily present in eggs and absent in sperm, allowing transmission to offspring only through females.
- (d) They integrate their genetic material into the host genome, altering sex determination pathways.

25. With reference to the 'Pink Bollworm (*Pectinophora Gossypiella*)', consider the following statements:

1. It is a worm that destroys parts of the developing sugarcane and cotton fruit.
2. It is native to Asia and now recorded in nearly all the cotton-growing countries of the world.

Which of the statements given above is/are correct?

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

26. With reference to Tiger Reserve of India, Consider the following pairs :

Tiger Reserve	Region
1. Bandipur Tiger Reserve	: Rajasthan
2. Sathyamangalam Tiger Reserve	: Tamil Nadu
3. Melghat Tiger Reserve	: Assam

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

27. With reference to Kashmir Willow (*Salix alba*), consider the following statements:

1. Native to Kashmir, it is a deciduous tree that can grow up to 30 meters.
2. It has a high capacity to convert solar radiation into chemical energy.
3. Its wood is primarily used in the sports industry.

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

28. With reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), consider the following statements:

1. CITES is a legally binding international treaty that prohibits all commercial trade in endangered species.
2. India is a signatory to CITES.
3. CITES categorizes species into three appendices based on their level of threat, with Appendix I including the most endangered species.

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

29. With reference to the Amazon Rain Forests, which of the following statements is/are correct?

1. It belongs to only five nations of the South American Continent.
2. Mashko Piro tribe inhabit the remote regions of the rainforest.

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

30. Consider the following statements:

1. India has a target of meeting 30% of its energy requirement from renewable sources by 2030.
2. India has set a target of becoming a net zero carbon country by 2070.

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

31. Which of the following statements is/are correct regarding 'Miyawaki Technique'?

- (a) This method involves planting two to four different types of Indigenous trees within every square metre.
- (b) It follows the principles of natural forestry.
- (c) It is one of the best techniques for quickly establishing a forest cover on degraded land.
- (d) All of the above.

32. Consider the following statements about Bamboo:

1. Bamboo is an annual grass found in tropical regions.
2. India's North-Eastern states and West Bengal have the highest concentration of bamboo.
3. Bamboo is a slow carbon sequestering plant with limited environmental benefits.
4. Bamboo is used for construction, textiles, and musical instruments.

Which of the above given statements are correct?

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

33. Zebra mussels, recently mentioned in the news are a type of:

- (a) Fish (b) Amphibian
(c) Mollusk (d) Insect

34. With reference to the genetically modified (GM) crops, consider the following statements:

1. The Genetic Engineering Appraisal Committee (GEAC) is responsible for the assessment of proposals related to the commercial release of GM crops.
2. Bt Cotton and GM Mustard are the only GM crops that are allowed to be grown 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

35. With reference to White category sectors, which of the following statements is/are correct?

1. The Central Pollution Control Board introduced the category according to the pollution index.
2. Wind and solar power projects are part of the White category sectors.

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

- 36.** With reference to the Sendai Framework for Disaster Risk Reduction, consider the following statements:
1. It was adopted at the Third World Conference on Disaster Risk Reduction in Sendai, Japan, in 2015.
 2. The primary goal of the Sendai Framework is to substantially reduce disaster risk and losses in lives, livelihoods, and health by 2050.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 37.** The Climate Finance Action Fund (CFAF) is a recently proposed initiative aimed at addressing climate change. Which of the following best describes the primary objective of the CFAF?
- (a) To provide financial assistance to developed countries for climate mitigation efforts.
(b) To create a global carbon market for trading emissions credits.
(c) To mobilize funds from fossil fuel producers to support climate projects in developing countries.
(d) To enhance technology transfer for renewable energy projects in emerging economies.
- 38.** Recently, The Central Zoo Authority (CZA) has given its final approval for a cheetah conservation breeding centre at which of the following regions?
- (a) Banni Grasslands (b) Khajjiar Grasslands
(c) Sundarbans National Park (d) Western Ghats
- 39.** Which of the following statements regarding *Aquilaria malaccensis* (agarwood) is/are correct?
1. *Aquilaria malaccensis* is an evergreen tree native to Northeast India, Bangladesh, Bhutan, and parts of Southeast Asia.
 2. The oil and chips from *Aquilaria malaccensis* are highly valued in the market.
 3. *Aquilaria malaccensis* is classified as Critically Endangered by the IUCN.
- Select the correct answer using the codes given below:
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2, and 3
- 40.** Consider the following statements:
1. India committed to revise its emissions intensity to 45% by 2030 in the updated set of Nationally Determined Contributions (NDCs)
 2. India has also committed to source 30% of its electricity in 2030 from non-fossil fuel resources.
- 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
- 41.** With reference to the *Aquilaria malaccensis* (agarwood), consider the following statements:
1. India is home to only two species of *Aquilaria* namely *A. malaccensis* and *A. khasiana*.
 2. It is used in the aroma industry, in medicine preparations, preparations of air fresheners and purifiers.
 3. It is grown in the southern states of India.

How many of the statements given above are correct?

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

42. Consider the following statements:

1. Sturgeons live only in the freshwater of Azerbaijan and Kazakhstan.
2. Stellate sturgeon are classified as least concern species in IUCN Red List.

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

43. Which of the following statements is correct regarding Integrated Nutrient Management (INM) practices?

- (a) It enhances the availability of applied as well as native soil nutrients.
- (b) It provides balanced nutrition to crops and minimizes the negative effects resulting from hidden deficiencies and nutrient imbalance.
- (c) It improves and sustains the physical, chemical and biological functioning of soil.
- (d) All of the above.

44. Consider the following statements regarding hoolock gibbons found in India:

1. The Western hoolock gibbon is found in all states of north-east India.
2. The Eastern hoolock gibbon is listed as Critically Endangered in 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

45. Consider the following statements:

1. Project Tiger was launched in 1973 as a central sector scheme.
2. India is now home to more than 70% of the world's wild tigers.

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

46. Which statement is **not** correct about Charles Darwin's frog (*Minervarya charlesdarwini*)?

- (a) It exhibits a unique upside-down mating behavior.
- (b) It is primarily found in the Amazon rainforest.
- (c) It is classified as a vulnerable species.
- (d) It has adapted to breeding in artificial water bodies.

47. With reference to the Western Ghat, which of the following statements is/are correct?

1. It is a long mountain chain which covers an area under six states of India.
2. Western Ghats were accorded the World Heritage Status by UNESCO in 2012.

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

48. Which of the following statements is **not** correct regarding mangroves?
- They form a link between marine and terrestrial ecosystems.
 - West Bengal has the largest mangrove cover in India.
 - Mangroves provide critical habitat covering tropical coasts in more than 100 countries.
 - None of the above.

EXPLANATIONS

1. (d)

Context:

- Scientists have found the first evidence of insects crossing an entire ocean where the painted lady butterflies reached South America from West Africa, after a 4,200 kilometers journey across the Atlantic.

About:

- Family:** Nymphalids
- Wing Span Range** (male to female): 50-56mm
- Distribution:** It is one of the most widespread of all butterflies, found on every continent except Antarctica and South America.
- IUCN Status:** Least Concern



2. (b)

Statement 1 is not correct: Appearance: The great Indian bustard can easily be distinguished by its **black crown on the forehead contrasting with the pale neck and head.**

- The body is brownish and the wings are marked with black, brown and grey.
- Distribution:** Its population is confined **mostly to Rajasthan and Gujarat.** Small populations occur in Maharashtra, Karnataka and Andhra Pradesh.

Statement 2 is correct: Listed in Schedule I of the Indian Wildlife (Protection) Act, 1972,

- Appendix I of CITES,
- Critically Endangered on the IUCN Red List.**

3. (b)

Statement 1 and 2 are 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 document outlines 17 Sustainable Development Goals (SDGs) and 169 associated targets.
- The SDGs, also known as the Global Goals, **came into force with effect from 1st January 2016.**
- Aim:** The SDGs serve as a **comprehensive blueprint** aimed at **achieving a better and more sustainable future for all.**

- **Applicability:** The SDGs are universal, applying to all nations—developed, developing and least developed countries.
 - Countries are primarily responsible for following up and reviewing the progress made in implementing the goals and targets at the national level until 2030.

Statement 3 is not correct: Legality: The SDGs are **not legally binding**, but they have effectively become international obligations and have the potential to reorient domestic spending priorities in countries.

4. (a)

Statement 1 is correct: While scientific literature disagrees about what constitutes megafauna, the term is **generally used to describe animals weighing more than 50 kg**.

- The term was first used by the **English naturalist and explorer Alfred Russel Wallace** in his 1876 book, *The Geographical Distribution of Animals*

Statement 2 is not correct: Megafauna may be classified based on their dietary type as megaherbivores (plant-eaters), mega carnivores (meat-eaters), and mega omnivores (who eat both plants and meat).

- **Ostriches are mega omnivores**, with an adult ostrich weighing anywhere between 90 and 140 kg, with height between seven and nine feet.

5. (b)

Context: District Panchayat of Kottayam (Kerala) have constituted the technical committee to address the menace of water hyacinth.

Water Hyacinth

- It is a fast-growing aquatic plant.
- A **native of Brazil**, the weed has spread to other parts of the world including India.
- Water hyacinth can form dense mats that spread out across water surfaces eventually choking the entire water body.
- Water hyacinth grows from seed and through vegetative reproduction.
- It is also known as the **“terror of Bengal”** due to its invasive growth tendencies.

6. (a)

Scientists have identified a species of desert moss called **‘Syntrichia caninervis’** capable of surviving Mars-like conditions.

Syntrichia caninervis is a globally distributed **moss species** that thrive in severe desert environments like Tibet, Antarctica and circumpolar regions, forming part of the resilient biological soil crust.

- The researchers conducted rigorous tests in controlled laboratory settings to assess the moss’ tolerance to extreme cold, gamma radiation and simulated Martian conditions.

7. (d)

Statement 1 not correct: Palm trees are not exclusively found in tropical rainforests. While they are common in tropical and subtropical regions, they can also be found in other types of environments, including deserts and coastal areas.

Statement 2 is not correct: Palm oil is derived from the fruit of the oil palm (*Elaeis guineensis*), not the coconut palm (*Cocos nucifera*). The oil palm is specifically cultivated for its oil-rich fruit, which is different from the coconut palm that produces coconuts.

8. (b)

News: After decades of trying to control the population of Indian house crow, the Kenyan government has planned to poison 1 million house crows by December 2024.

Indian house crow

- **Scientific Name:** Corvus splendens
- **Distribution:** Native to India, the Middle East and nearby parts of Asia, the Indian house crow is now found in many parts of the world, where they arrived assisted by shipping.
- **Invasive species:** This species can make use of resources with great flexibility and is regarded as one of the world's most invasive bird species.
- **IUCN Status :** Least Concern.

9. (c)

Context:

- A lone female Gharial has been spotted for more than three years in a stretch of the river within the **Kaziranga National Park**.

Kaziranga National Park

- **Location:** Golaghat, Karbi Anglong and Nagaon districts of the state of Assam.
- It was declared a **Wildlife Sanctuary in 1950** and notified as Kaziranga National Park in 1974 under the Wildlife (Protection) Act, of 1972.
- It was also recognized as a **UNESCO World Heritage Site in 1985**.
- The Park is the abode of more than **70%** of **One Horned Rhinoceros** in the world.

10. (c)

Context:

- A lone female Gharial has been spotted for more than three years in a stretch of the river within the Kaziranga National Park.

About:

- The Gharial derives its name from a **bulbous knob-like protuberance on the snout of breeding males** that resembles a ghara, which in Hindi means an earthen pot.
- **They are found** mainly in the Chambal, Girwa, Ghagra, and Gandak rivers.
- **IUCN Status:** Critically Endangered
- It is listed under **Schedule 1** of the Wild Life (Protection) Act, 1972.

11. (d)

Kerala University of Fisheries and Ocean Studies (Kufos) preparing to launch a genome editing mission to boost Pearl Spot production

All the statements are correct

Pearl Spot (Etroplus suratensis) is commonly known as “Karimeen” in Kerala and is an indigenous fish extensively found along the east and south-west coasts of Peninsular India.

- It is a **euryhaline species** that inhabits mainly brackish water and river mouths.
- It is distributed in the coastal regions of peninsular **India and Sri Lanka**.
- In India, the wild populations have been recorded from the states of Kerala and Tamil Nadu.
 - There are also populations in Goa, Andhra Pradesh, Orissa and West Bengal
- **IUCN Red List Status** Least Concern

12. (c)

Context:

- The irrigation department in Poonthura region, Kerala is set to construct eight groynes to resolve the challenge of coastal erosion.

Groynes

- A groyne is a **rigid hydraulic structure** built perpendicularly from an ocean shore or a river bank, interrupting water flow and limiting the movement of sediment.
- It is usually made out of **wood, concrete, or stone**.

Advantages

- Groynes are easy to construct. They have long term durability and are low maintenance.
- They reduce the need for the beach to be maintained through beach nourishment and the recycling of sand.

13. (b)

News: India has decided to sign and ratify the High Seas Treaty which is a global agreement for conservation and protection of biodiversity in the oceans.

What are High Seas?

- The High Seas are the areas outside the national boundaries of countries, and are open to all for internationally lawful purposes such as navigation, overflight, laying submarine cables and pipelines, etc.

High Seas Treaty

- It is an international treaty under the United Nations Convention on the Law of the Sea and is also known as Biodiversity Beyond National Jurisdictions (BBNJ) Agreement.
- It sets precise mechanisms for the sustainable use of marine biological diversity through international cooperation and coordination.
- Parties cannot claim or exercise sovereign rights over marine resources derived from the high seas and ensure fair and equitable sharing of benefits.
- It would also contribute to achieving several SDGs, particularly **SDG 14 (Life Below Water)**.

14. (a)

Statement 1 is correct: The MAB Programme is indeed an initiative of UNESCO (not UNEP) that seeks to promote sustainable development by integrating the conservation of biological diversity with economic and social development.

Statement 2 is not correct: While India has a significant number of biosphere reserves (18), it does not have the highest number globally.

Statement 3 is not correct: Not all biosphere reserves in India are part of the World Network of Biosphere Reserves. As of 2021, 12 out of the 18 biosphere reserves in India have received this recognition.

15. (d)

About Pangong Lake

- Pangong Tso is a **high-altitude, endorheic (landlocked)** lake located in the Himalayas, spanning the disputed India-China border.
- Situated at 4,225 meters, and **predominantly saline**.
- The **lake's water changes colors**, appearing blue, green, or even red at different times, depending on sunlight and other factors.
- Pangong Tso is an essential **breeding ground for a wide variety of birds**, including several migratory species.
- **Home to nomadic tribes**, Pangong Tso also holds cultural significance, featuring in local folklore.

16. (c)

Context: The Union Cabinet has approved India to sign the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement.

What is the BBNJ Agreement?

- The BBNJ Agreement, or the '**High Seas Treaty**', is an international treaty under the **United Nations Convention on the Law of the Sea (UNCLOS)**.
- It sets **precise mechanisms for the sustainable use of marine biological diversity** through international cooperation and coordination.
- Parties cannot claim or exercise sovereign rights over marine resources derived from the high seas and ensure **fair and equitable sharing of benefits**.
 - **High Seas** (areas beyond national jurisdiction) are the global common oceans open to all for internationally lawful purposes such as navigation, overflight, laying submarine cables and pipelines, etc.

17. (c)

Statement 1 is correct: UNCLOS is the primary international legal framework governing all activities in the oceans and seas.

Statement 2 is not correct: UNCLOS divides marine areas into four zones, not five: Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ), and the High Seas. The continental shelf is an extension of a coastal state's land territory under the sea, but not a distinct zone like the others.

Statement 3 is correct: UNCLOS comprehensively defines the rights and responsibilities of states concerning various aspects of ocean use, including resource exploitation, navigation, and environmental protection.

18. (a)

- **Bornean elephant** : It is the smallest Asian elephant subspecies
 - IUCN Red List of Threatened Species: The Bornean elephant has been assessed as **Endangered**
- **Painted lady butterflies** are the most widespread butterfly in the world. It is found on all continents except Australia, most of South America, and Antarctica
 - IUCN Status: **Least Concern**
- **Indian star tortoises (Geochelone elegans)** inhabit a variety of dry vegetation types, including scrublands, grasslands, desert edges and agricultural landscapes of fields.
 - It is listed under Appendix I of the CITES (Convention on International Trade in Endangered Species) list and categorised as '**Vulnerable**' in the IUCN (International Union for Conservation of Nature) Red List of threatened species

19. (a)

News: Kerala University of Fisheries and Ocean Studies (Kufos) is preparing to launch a genome editing mission to boost Pearl Spot production

About Pearl Spot (Etroplus suratensis)

- It is commonly known as "Karimeen" in Kerala and is an indigenous fish extensively found along the east and south-west coasts of Peninsular India.
- It is a **euryhaline species** that inhabits mainly brackish water and river mouths.
- It is distributed in the coastal regions of peninsular India and Sri Lanka.
- In India, the wild populations have been recorded from the states of Kerala and Tamil Nadu.
 - There are also populations in Goa, Andhra Pradesh, Orissa and West Bengal
- **IUCN Red List Status** Least Concern.

20. (b)

Statement 1 is not correct: FishMIP is not directly under UNEP. While it collaborates with UN agencies like the FAO, it's an independent international network of scientists and researchers.

Statement 2 is correct: It aims to understand the long-term impacts of climate change on marine ecosystems and fisheries.

21. (c)

Scientists from the Zoological Survey of India (ZSI) discovered a new deep-water **dogfish shark** species named **Squalus hima** in Kerala.

- The discovery was made at Sakthikulangara fishing harbour, along the Arabian Sea.
- Squalus is a genus of dogfish sharks in the family Squalidae. commonly known as spurdogs, and are characterized by smooth dorsal fin spines.

22. (d)

Statement 1 is not correct: The Sarus crane is the tallest flying bird in the world standing 152-156 cm tall with a wingspan of 240cm. However, it is not found only in the Indian subcontinent but also in Southeast Asia and Northern Australia.

Statement 2 is not correct: The Sarus Crane is listed as Vulnerable on the IUCN Red List, and its population is declining due to habitat loss, agricultural expansion, and pesticide ingestion.

23. (c)

As per the study, air pollution disproportionately harms beneficial insects like bees and wasps compared to crop-destroying pests.

Key Findings

- Pollinators, including bees, experienced a 39% decline in foraging efficiency when exposed to elevated air pollution. However, pests like aphids remained largely unaffected.
- Air pollutants alter or mask chemical signals that beneficial insects use for crucial activities like finding food and mates, while pests rely more on direct contact or visual cues.
- Among various behaviors studied, the ability to find food was the most severely impaired by air pollution, declining by one-third on average.
- Ozone and nitrogen oxides are among the most harmful air pollutants for insects.

Implications

- The decline in beneficial insects, especially pollinators, could negatively impact crop yields and food security.
- Disruptions to insect populations can have cascading effects on entire ecosystems, affecting biodiversity and ecological balance.

24. (c)

Wolbachia bacteria are known for their unique ability to manipulate the reproductive processes of their insect hosts to enhance their own transmission. Wolbachia are primarily present in the cytoplasm of the eggs but are generally absent in sperm. This allows the bacteria to be transmitted to the next generation only through the female line.

25. (b)

Statement 1 is not correct

- **Pink Bollworm (Pectinophora Gossypiella)** is a worm that destroys parts of the developing **cotton fruit (not sugarcane)**, such as the **square (flower bud)** and the **boll (rounded sac of seeds with cotton fibres)**.
 - Adult worms are thin grey moths that lay eggs on buds, flowers, and bolls.

Statement 2 is correct

- It is **native to Asia** and now recorded in **nearly all the cotton-growing countries of the world**.
- Its **cryptic nature** means that damage becomes apparent only when the bolls open, which is often too late for effective intervention.
 - It cuts through the lint and stains it in the process, resulting in a loss of quality.

26. (a)**Bandipur Tiger Reserve**

- It was established in the 1930s as a wildlife sanctuary, which became a tiger reserve in 1973 under **Project Tiger**.
- **It is located** at the tri-junction area of **Karnataka, Tamil Nadu and Kerala**.
- This area has the **River Kabini** in its north and **River Moyar** in its south.

Sathyamangalam Tiger Reserve (STR)

- It is located in the Erode district of **Tamil Nadu**.
- It was declared a tiger reserve in 2013.
- It serves as a crucial link between the Eastern and Western Ghats.

Melghat Tiger Reserve

- It is situated in the **Satpura range**, in **Maharashtra**.
- Melghat is known for its rugged terrain, with hills, deep valleys, and the Tapti River flowing through it. The reserve is primarily covered with dry deciduous forests, providing a suitable habitat for tigers, leopards, sloth bears, and various species of deer.

27. (d)

Statement 1 is correct: Native to Kashmir, the Kashmiri Willow is a deciduous tree that can grow up to 30 meters (98 feet). It has slender trunks and a narrow, conical canopy.

Statement 2 is correct: Willows exhibit superior growth and productivity due to their highest capacity to convert solar radiation into chemical energy. Willows have extensive fibrous root system with the majority of fine-roots found in the upper 40–45 cm of the soil profile.

Statement 3 is correct: Cricket bat manufacturing is a significant application in the sports industry. The willow (*Salix alba* var. *caerulea*) used in making these bats was brought to Kashmir in the 19th century by the British after being recommended by Sir Walter R. Lawrence and J.C. Mac Donell, the first chief of the Forest Department in J&K.

28. (b)

Statement 1 is not correct: CITES **regulates, rather than prohibits**, international trade in endangered species. It aims to ensure that such trade is sustainable and legal. Although CITES is **legally binding** on the Parties, it does not take the place of national laws. Rather, it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.

Statement 2 is correct: India is a signatory to CITES and has implemented national laws to enforce its provisions.

Statement 3 is correct: CITES does categorize species into three appendices based on their level of threat, with Appendix I including the most endangered species.

29. (b)**Amazon Rain Forests**

- **Location:**The region belongs to **nine nations** of the **South American** continent.

- It is bounded by the **Guiana Highlands** to the north, the **Andes Mountains** to the west, the **Brazilian central plateau** to the south, and the **Atlantic Ocean** to the east.
- **Area Covered:**The majority of the forest, 60%, is in **Brazil**, followed by **Peru** with 13%, **Colombia** with 10%, and with minor amounts in **Bolivia, Ecuador, French Guiana, Guyana, Suriname and Venezuela**.
- **Mashko Piro tribe**, the Nomadic hunter-gatherers inhabit the remote regions of the **Amazon rainforest**.

30. (b)

India has set following resolute targets to usher in a renewable revolution:

- 500 GW of renewable energy capacity by 2030;
- Meeting 50% of its energy requirement from renewable sources by 2030; hence, **Statement 1 is not correct:**
- Reducing the total projected carbon emissions by 1 Bn Tonnes by 2030;
- Reducing the carbon intensity of its economy by under 45%;
- Becoming a net zero carbon country by 2070. Hence, **Statement 2 is correct.**

31. (d)

News: Recently, the Delhi Lieutenant Governor announced that layered plantations, Miyawaki forests, and aquatic forests are among the techniques that could be incorporated to maximize the utility of the land in Delhi.

What are Miyawaki forests?

- Named after Japanese botanist **Akira Miyawaki**, this method involves planting two to four different types of Indigenous trees within every square metre.
- It is one of the best techniques for quickly (within 3-4 years) establishing a forest cover on degraded land that has previously been used for construction or agriculture.
- It works well because it follows the principles of natural forestry, which include employing local plants and imitating the processes of how forests regenerate naturally.

32. (b)

Statement 1 is not correct: Bamboo is a perennial plant, not an annual grass.

Statement 2 is correct: North-Eastern states and West Bengal have over 50% of India's bamboo resources.

Statement 3 is not correct: Bamboo is known for rapid carbon sequestration, making it beneficial for the environment.

Statement 4 is correct: Bamboo has diverse uses in construction, textiles, and musical instruments.

33. (c)

In News: Signs of invasive zebra mussel confirmed in Colorado River.

About zebra mussel

Zebra mussels are a type of freshwater fingernail-sized mollusc native to Europe and Asia. They were accidentally introduced to North America in the 1980s and have since become an invasive species, causing significant ecological and economic damage. Zebra mussels are often found attached to rocks, piers, and other underwater structures, and can grow up to 1.5 inches in length.

34. (a)

Statement 1 is correct: The Genetic Engineering Appraisal Committee (GEAC): Under the Ministry of Environment, Forest and Climate Change (MoEF&CC), it is responsible for the assessment of proposals related to the commercial release of GM crops.

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**.
- 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**.

35. (c)

Context:

- The industries categorized under the '**white category**' by the **Central Pollution Control Board** will not require prior permission of the state pollution control boards to establish and operate under the **Air Act, 1981** and **Water Act, 1974**.

White category sectors

- In 2016, the **Central Pollution Control Board** reclassified industries based on their pollution potential.
- This involved assessing **pollution index** scores based on emissions, effluent discharge, hazardous waste generation, and natural resource consumption.
- The "**white category**" was introduced during this reclassification, alongside updated scores for the previously existing categories — **red, orange, and green**.
 - The PI of any industrial sector is a number from **0-100**.
 - Industrial sectors with a **Pollution Index (PI)** score **including and up to 20** come under the category.
- **Wind and solar power projects, assembly of air coolers, bicycle assembly** are some of the projects and activities that come under the white category.

36. (a)

Statement 1 is correct: Sendai Framework for Disaster Risk Reduction is a **global agreement adopted by UN member states** to guide efforts in reducing disaster risk and building resilience to disasters.

- It was adopted at the **Third World Conference** on Disaster Risk Reduction in **Sendai, Japan, in 2015**.

Statement 2 is not correct: The primary goal of the Sendai Framework is to substantially reduce disaster risk and losses in lives, livelihoods, and health **by 2030**.

37. (c)

In News: Azerbaijan, which will host the 29th Conference of Parties to the United Nations Framework Convention on Climate Change, announced the Climate Finance Action Fund to help developing countries fight climate change.

About Climate Finance Action Fund

- The fund will receive annual contributions from fossil fuel-producing countries and companies. Initial fundraising aims for \$1 billion.
- The fund will target climate projects in developing countries, meeting the next generation of national climate plans to limit global warming to 1.5 degrees Celsius, and addressing the consequences of climate change-fuelled disasters.

38. (a)

The Central Zoo Authority (CZA) has given its final approval for a cheetah conservation breeding centre in Gujarat's Banni grasslands.

- Banni was selected from among ten potential sites identified in 2009 for cheetah reintroduction in India.
- Its savannah-like habitat, similar to East African landscapes, and the presence of Pilu trees (*Salvadora persica*) for perching make it an ideal location.
- Historically, cheetahs were found in this region, with records of cheetah hunting in Saurashtra and Dahod until 1921, and references to their presence in Gujarat until the early 1940s.

39. (d)

Statement 1 is correct: *Aquilaria malaccensis* is native to Northeast India, Bangladesh, Bhutan, and parts of Southeast Asia.

Statement 2 is correct: Both the oil and chips of *Aquilaria malaccensis* are highly valued in the market for their aromatic properties.

Statement 3 is correct: *Aquilaria malaccensis* is listed as Critically Endangered by the IUCN.

40. (a)

Statement 1 is correct: India has communicated that the intensity of its energy emissions had reduced by 33% from 2005-2019, 11 years ahead of target.

- It also committed to revising its emissions intensity to 45% by 2030 in the updated set of NDC.

Statement 2 is not correct: India has also committed to source 50% of its electricity in 2030 from non-fossil fuel resources.

41. (b)

Statement 1 and 2 are correct: India is home to only two species of *Aquilaria* namely *A. malaccensis* and *A. khasiana*.

- **Uses:** It is highly valued for its traditional uses as incense, the extracts (agarwood oil) of plants are also used in water-based perfumes.
 - It is used in the aroma industry, in medicine preparations, preparations of air fresheners and purifiers.
 - The essential oil extracted from agarwood has anti-inflammatory, anti-rheumatic, analgesic and antioxidant properties.

Statement 3 is not correct: It is mainly grown in West Bengal and North-Eastern States of India namely Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh and Nagaland.

- Since agarwood is cultivated in different parts of India, especially in the northeast, the development is going to benefit lakhs of farmers in certain districts of Assam, Manipur, Nagaland, and Tripura.

42. (d)

In News: The WWF report documented 395 cases of illegal sturgeon fishing and trade affecting 1,031 sturgeon individuals from 2016 to 2023.

Statements 1 and 2 are not correct : Sturgeons are the most endangered species group on earth. These gentle giants have been around since the age of the dinosaurs. They usually live in freshwater, coastal waters and inner seas throughout Azerbaijan, Bulgaria, China, Iran, Kazakhstan, Romania, Russia, Turkmenistan, Turkey, Ukraine, other European countries and North America. Stellate sturgeon, Russian sturgeon, and beluga sturgeon are Critically Endangered.

- Sterlet sturgeon is listed as Endangered.

43. (d)

Context: The long term fertilizer experiment conducted by **Indian Council of Agriculture Research (ICAR)** revealed that **Integrated Nutrient Management (INM)** practices maintains the soil fertility status.

What are Integrated Nutrient Management (INM) practices?

- It refers to the maintenance of soil fertility and of plant nutrient supply at an optimum level for sustaining the desired productivity through optimization of the benefits from all possible sources of organic, inorganic and biological components in an integrated manner.
- It promotes changes in land use, crop rotations, and interactions between forestry, livestock and cropping systems as part of agricultural intensification and diversification.

Advantages

- Enhances the availability of **applied as well as native soil nutrients**.
- Synchronizes the nutrient demand of the crop with nutrient supply from native and applied sources.
- Provides **balanced nutrition to crops** and minimizes the negative effects resulting from hidden deficiencies and nutrient imbalance.
- Improves and sustains the **physical, chemical and biological functioning of soil**.
- Minimizes the deterioration of soil, water and ecosystem by promoting carbon sequestration, reducing nutrient losses to ground and surface water bodies and to the atmosphere.

44. (a)

Statement 1 is correct: The Western hoolock gibbon is indeed found in all states of north-east India, with its habitat restricted between the south of the Brahmaputra river and east of the Dibang river.

Statement 2 is not correct: While the Eastern hoolock gibbon is found in specific pockets of Arunachal Pradesh and Assam in India, as well as in southern China and north-east Myanmar, it is listed as **Vulnerable** by the IUCN, not Critically Endangered.

45. (b)

Context: Project Tiger is expected to displace at least 550,000 Scheduled Tribes and other forest dwellers.

About Project Tiger

- India has made significant strides in protecting its national animal, the Bengal tiger, through initiatives like Project Tiger which **was launched in 1973** as a **Centrally Sponsored Scheme** in nine reserves of different States (Assam, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Uttar Pradesh and West Bengal).
- The project focuses on the selection and preservation of areas which are specially managed to conserve the tiger population and their associated ecosystems
- Project Tiger has put the endangered wild tigers of India on an assured path of recovery and has completed 50 years of successful implementation.
- **India is now home to more than 70% of world's wild tigers:-** As per the 5th cycle of All India Tiger Estimation 2022 summary report released by the Prime Minister of India during **Project Tiger's commemorative event**, India has a minimum of 3167 tigers and now is home to more than 70% of wild tiger population of the world.

46. (b)

In News: As per the researchers, Charles **Darwin's frog** is displaying a curious mating, as well as egg-laying behavior, which is concerning in the context of climate change.

About:

- They are named after Darwin, but Darwin did not study or describe this species.
- Scientifically known as **Minervarya charlesdarwini**, Charles Darwin's frogs are **endemic to the Andaman Islands**.
- Researchers found both male and female Charles Darwins adopting an inverted position on the walls of tree cavities, keeping their bodies completely above the water while mating as well as laying eggs.
- Due to fragmented forest habitats, they now **use artificial objects like plastic bags as breeding sites**.
- Listed as **vulnerable** on the International Union for Conservation (IUCN) of Nature Red List.

47. (c)

Western Ghat

- The Western Ghats are a **1,600-km** long mountain chain along the west coast of India running from the river Tapi in the north to Kanyakumari in the south.
- It covers **six states** — Gujarat, Maharashtra, Goa, Tamil Nadu, Karnataka and Kerala. About 60 percent of the mountain range is in Karnataka.
- **Significance:** These Ghats are home to high mountain forests, which moderate the tropical climate of the region. They are home to 325 globally threatened flora, fauna, bird, amphibian, reptile and fish species.
- Western Ghats were accorded the **World Heritage Status by UNESCO in 2012**.

48. (d)

Context:

- The Global Mangrove Alliance (GMA) has released a report titled '**The State of the World's Mangroves, 2024**' on World Mangrove Day (26 July).

What are Mangroves?

- Found in **123 countries**, mangroves are tropical plants that are adapted to loose, wet soils, salt water and being periodically submerged by tides.
- They form a **link between marine and terrestrial ecosystems**, protect shorelines, and provide habitat for a diverse array of terrestrial organisms.
- As per the **India State of Forest Report, 2021**, mangrove cover in India is estimated to be spread across 4,992 sq km. With an estimated 2,114 sq km of mangrove forests, **West Bengal has the largest** mangrove cover in India.



MISCELLANEOUS

1. The '*Swaran Singh Committee*', sometimes appeared in news, is in context of:
(a) Unemployment (b) Defence and Security
(c) Agriculture (d) Education
2. Recently, the '*Order of Saint Andrew the Apostle*' was seen in the news. It is the highest civilian honour of which of the following countries?
(a) USA (b) Austria
(c) France (d) Russia
3. '*Durand Cup*' recently seen in the news is related to
(a) Football (b) Hockey
(c) Cricket (d) Kabaddi
4. '*National Gopal Ratna Award*' recently seen in the news is related to
(a) Education Sector (b) Handicraft Sector
(c) Healthcare Sector (d) Livestock and Dairy Sector
5. With reference to the World Youth Skills Day, consider the following statements:
 1. The Day is observed on July 15 annually.
 2. It was designated by the United Nations General Assembly in November 2014.
 3. The day also marks the launch of Skill India Mission.How many of the statements given above are correct?
(a) Only one (b) Only two
(c) All three (d) None
6. The '*Beijing Declaration and Platform for Action*', sometimes appeared in the news, is in the context of:
(a) Sustainable Water Use (b) Political Participation of Women
(c) Urban Waste Management (d) Cross Border Tax Reform
7. Consider the following statements with reference to the International Mathematics Olympiad (IMO).
 1. It is the World Championship Mathematics Competition for High School students.
 2. It is held annually in the United Kingdom .
 3. The first IMO was held in 1959 with 100 countries participating.How many of the statements given above are correct?
(a) Only one (b) Only two
(c) All three (d) None

8. According to the latest ranking of the Henley Passport Index, which of the following countries has occupied the top spot?
- (a) Singapore (b) Japan
(c) France (d) Germany
9. 'Baswan Committee' and 'Kothari Committee', recently seen in the news is related to the
- (a) Railway Reforms (b) Empowering Tribals
(c) Centre-State Relations (d) Civil Service Reforms
10. 'Project Nexus' recently seen in the news is related to which of the following?
- (a) Operation to Curb Drug Nexus (b) Curbing Money Laundering
(c) Against Organ Trade (d) Instant cross-border retail payments
11. Which one of the following countries plans to start building the world's first molten salt reactor power station?
- (a) Australia (b) Brazil
(c) China (d) Russia
12. 'Gadgil Committee' and 'Kasturirangan Committee', recently seen in the news is related to the
- (a) Sub-Categorisation of OBCs (b) Protection of Western Ghats
(c) Railway Reforms (d) Privatisation of Public Sector Undertakings

EXPLANATIONS

1. (d)

In News: Recent paper leak incidents and nationwide protests gave the impetus and topic of discussion to bring back Education in India under the State List of the Indian Constitution.

- During British rule, the **Government of India Act, 1935** established a Federal Structure in our polity, distributing legislative subjects between the **Federal Legislature (now the Union)** and the **Provinces (now the States)**.
- **Education**, being an essential public good, was initially placed under the **Provincial List**.
- After independence, this arrangement continued, with education falling under the '**State List**' in the distribution of powers.
- However, during the Emergency, the **Swaran Singh Committee** recommended placing '**Education**' in the **Concurrent List** to facilitate all-India policies on the subject.
 - It led to the **42nd Constitutional Amendment (1976)**, which shifted 'Education' from the State list to the Concurrent List.
- **44th Constitutional Amendment (1978)**: The Janata Party government attempted to reverse the 42nd amendment by bringing '**Education**' back to the **State List**, but it **didn't pass** in the Rajya Sabha.

2. (d)

News: Prime Minister Narendra Modi has been honoured with Russia's highest state decoration, the '**Order of Saint Andrew the Apostle**' for his role in promoting bilateral ties.

About:

- India and Russia share a historically deep strategic partnership, characterized by cooperation in defense, nuclear energy, and space exploration.

'Order of Saint Andrew the Apostle'

- It is Russia's oldest state decoration, established around 300 years ago by Peter the Great, the first Emperor of Russia.
- This prestigious award is presented to outstanding politicians, public figures, and other citizens of Russia for exceptional services that contribute to the prosperity, might, and glory of the country.
- Additionally, it can be awarded to heads of foreign states and governments.

Components of the award

- It includes a badge, a star, and a light blue silk moire ribbon.
- For those recognised for distinction in combat, the badge and star are adorned with swords.

3. (a)

Context: Recently, the President of India has unveiled the **Trophies of the Durand Cup Tournament 2024**.

About:

- The Trophies unveiled include the **Durand Cup, the President's Cup and Shimla Trophy**.

Durand Cup Tournament

- Organized by the Indian Armed Forces, it is **Asia's oldest** and the world's third oldest football tournament.
- Inaugurated in Shimla in 1888 as an Army Cup and only open to British Indian Army troops in India, later opened up to civilian teams.
- It is named after its founder, **Sir Mortimer Durand**, Foreign Secretary of British India.
- **Mohun Bagan Super Giant** are the defending champions, having won the tournament for a record 17th time, the most by any team.

4. (d)**National Gopal Ratna Award**

- It is one of the highest National Awards in the field of **livestock and dairy sector**, with an objective to recognize and encourage all individuals like Farmers rearing indigenous animals, AI Technicians and Dairy cooperative societies / Milk Producer Company / Dairy farmers Producers Organizations working in this sector.
- The Award is conferred in three categories, namely,
 - Best Dairy Farmer Rearing Indigenous Cattle / buffalo Breeds,
 - Best Artificial Insemination Technician (AIT) and
 - Best Dairy Cooperative / Milk Producer Company / Dairy Farmer Producer Organization.

5. (c)

All the statements are correct: The World Youth Skills Day is observed **on July 15 annually**.

- The initiative was designated by the **United Nations General Assembly** in **November 2014**, emphasizes the significance of **equipping youth** with necessary skills **to tackle unemployment and underemployment**.
- This year's World Youth Skills Day theme, **"Youth Skills for Peace and Development,"** highlights the role of youth in peacebuilding and conflict resolution.
- The day also marks the **launch of Skill India Mission**.

6. (b)

In News: Around the world, the representation of women in political spheres has seen significant progress over the years. However, this progress has been uneven, and there's still much work to be done.

- **Beijing Declaration and Platform for Action:** Balanced **political participation** and **power-sharing between women and men** in decision-making is the internationally agreed target set in the Beijing Declaration and Platform for Action.

7. (a)

In News: A six-member student team from India has secured the country its best performance ever in the International Mathematical Olympiad (IMO) 2024.

Statement 1 is correct : International Mathematics Olympiad (IMO) is the World Championship Mathematics Competition for High School students.

Statements 2 and 3 are not correct : IMO is held annually in a **different country**.

- The first IMO was held in 1959 in Romania, with 7 countries participating.
- It has gradually expanded to over 100 countries from 5 continents.
- The IMO Board ensures that the competition takes place each year and that each host country observes the regulations and traditions of the IMO.

8. (a)

Context:

- According to the latest ranking of the **Henley Passport Index**, India's passport now ranks at the **82nd** spot, allowing Indians visa-free entry to 58 countries.

About:

- The Henley Passport Index is the original, authoritative ranking of all the world's passports according to the number of destinations their holders can access without a prior visa.
- The Index is an annual list put together by **Henley & Partners**, a London-based global citizenship and residence advisory firm.
- It is based on exclusive data from the **International Air Transport Association (IATA)**.
- The index covers **227 destinations and 199 passports**.

Key findings

- **Singapore** occupied the **top spot** in the Index with its citizens having visa-free entry to 195 countries. It dethroned Japan from the first place, which is now at the second place along with Spain, France, Germany and Italy. The passports of all five countries allow visa-free access to 192 destinations.
- **Afghanistan's** passport at the 103rd spot, remains the **world's weakest**, allowing visa-free entry to only 26 destinations.

9. (d)

News: According to a parliamentary committee report, around 32.39 lakh candidates applied for examinations conducted by the UPSC in 2022-23. However, only 16.82 lakh candidates (51.95 %) appeared.

About:

- In 2015, an Expert Committee, chaired by **B. S. Baswan**, former Secretary, Ministry of Education, was constituted to comprehensively examine the various issues regarding CSE, which included high rate of absenteeism.

- At least nine committees, including the **Baswan Committee**, have been formed in the past to suggest reforms. In 1976, the **Kothari Committee** observed that the practice of “allocating candidates to different services before they join the Foundation Course, has not only no advantage, but leads to unhealthy rivalry and complexes.”

10. (d)

Earlier this month, the RBI joined Project Nexus, a **multilateral international initiative** to enable **instant cross-border retail payments** by interlinking **domestic Fast Payments System (FPS)**.

- As part of the project, the country’s **Unified Payments Interface (UPI)** and **FPSs of Malaysia, the Philippines, Singapore and Thailand** will be interlinked through Nexus.

11. (c)

Context:

- **China** plans to start building the world’s first molten salt reactor power station next year in the Gobi Desert.

About:

- **The Thorium Reactor** is scheduled to be completed in **2029**, generating heat at a maximum power of **60 megawatts**.
- **Applications:** The reactors have some potential military applications due to their compact structure and safety, such as powering naval ships, submarines and even aircraft.

Working of the Reactor?

- **Molten salt carrying thorium fuel enters the reactor** core through pipes to undergo a chain reaction.
- After the temperature rises, it flows out the other side and transfers heat to the molten salt without thorium that is circulating in a separate loop.
- The hot but **non-radioactive molten salt flows into the electricity plant** next to the reactor to drive a **carbon dioxide-based gas turbine for power generation**.
- The reactor **does not need water for cooling** because it uses liquid salt and carbon dioxide to transfer heat and generate electricity.

12. (b)

Context: Ecologist Madhav Gadgil, has termed the landslide disaster in Wayanad a man-made tragedy, attributing it to the Kerala government’s failure to implement crucial ecological recommendations.

Background

- Massive **landslides** at Mundakkai, Chooralmala, Attamala, and Noolpuzha in **Wayanad district** buried large areas under debris, resulting in the death of at least 84 people and leaving many injured.
- **Madhav Gadgil, the chairman of the Western Ghats Ecology Expert Panel (WGEEP)**, has highlighted that the panel’s report had classified the region into **three levels of ecological sensitivity**, with the areas now struck by the disaster being marked as highly sensitive.
- However, two years later, the **Kasturirangan report** had toned down the recommendations.

What is Landslide?

- Landslides are a geological phenomenon that involves the sudden and rapid movement of a mass of rock, soil, or debris down a slope under the influence of gravity.
- Landslides, usually, occur in areas having characteristics like Steep terrain such as hilly or mountainous areas, Presence of joints and fissures or areas where surface runoff is directed or land is heavily saturated with water.

