

DAILY MCQs COMPILATION

with

EXPLANATIONS

SEPTEMBER 2023

NEXT IAS

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HISTORY, ART & CULTURE

1. With reference to the Partition of Bengal, which of the following statements is/are correct?
1. The partition witnessed the nationalist response in the form of the Swadeshi Movement.
 2. Bankim Chandra Chattopadhyay wrote the song Banglar Mati, Banglar jol to call for unity among Bengalis.
- 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
2. Consider the following pairs:
- | Art | State |
|------------------------|--------------|
| 1. Longpi Pottery | Manipur |
| 2. Araku Valley Coffee | Assam |
| 3. Sheep Wool Stoles | Uttrakhand |
| 4. Meenakari | Rajasthan |
- How many pairs given above are correctly matched?
- (a) Only one (b) Only two
(c) Only three (d) All four
3. Consider the following statements:
1. Hyderabad was founded by the Nizams of the Asaf Jahi dynasty.
 2. In 1798, a subsidiary alliance was signed between the Nizam of Hyderabad and the British East India company.
 3. Operation Polo was launched by the Indian Government to integrate the princely state of Hyderabad into India.
- How many statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
4. With reference to the 'Standstill Agreement' signed during annexation of Hyderabad, a princely state, consider the following statements:
1. It was signed by Lord Mountbatten.
 2. It is valid for two years from the date of signature.
 3. Foreign Affairs, Defence and Communications were under control of Nizam of Hyderabad.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

5. Recently which of the following has been included in the UNESCO World Heritage List?
- (a) Martand Sun Temple, Jammu and Kashmir
 - (b) Santiniketan, West Bengal
 - (c) Bagh Caves, Madhya Pradesh
 - (d) Bandhavgarh National Park, Madhya Pradesh
6. With reference to the Chennakeshava temple, which of the following statements is/are correct?
1. It is located on the banks of the Yagachi River in Karnataka.
 2. The temple was commissioned in 1121CE during the reign of Veera Ballala III.
- 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 religious practices in India, the 'Samvatsari' and 'Pratikraman' belong to which of the following?
- (a) Jainism
 - (b) Buddhism
 - (c) Shaivism
 - (d) Vaishnavism
8. "Nuakhai festival", recently seen in the news, is celebrated in which of the following states?
- (a) Odisha
 - (b) Kerala
 - (c) Maharashtra
 - (d) Jammu and Kashmir
9. With reference to the Keshava temple, which of the following statements is/are correct?
1. The temple was commissioned by Somanatha Dandanayaka during the regime of Narasimha III in 1268 CE.
 2. The temple is inscribed in the UNESCO World Heritage list as the Sacred Ensembles of Hoysalas.
- Select the correct answer using the code given below:
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
10. Consider the following statements with reference to Bharatanatyam:
1. It is the first of India's traditional dances to be refashioned as a theatre art.
 2. The music of Bharatanatyam belongs to the Carnatic system of southern India.
 3. Bharatanatyam is performed only by female artists.
- Which of the statements given above are correct?
- (a) 1 and 2 only
 - (b) 2 only
 - (c) 1 and 3
 - (d) 3 only
11. He is credited with establishing the Advaita Vedanta School of Hindu philosophy. He composed devotional and meditative hymns like Soundarya Lahari, Sivananda Lahari, Nirvana Shalkam, Maneesha Panchakam and also authored books on the fundamentals of the Advaita philosophy. Which one of the following philosophers has been described above?
- (a) Madhvacharya
 - (b) Adi Shankaracharya
 - (c) Vallabhacharya
 - (d) Ramanujacharya

12. Toto communities, sometimes appeared in the news, belong to which of the following states?
- (a) West Bengal (b) Arunachal Pradesh
(c) Tripura (d) Assam
13. The Government of India proposed to celebrate the birthday of which of the following personalities as Bharatiya Bhasha Divas (11 December) ?
- (a) Lata Mangeshkar (b) Ramdhari Sinh Dinkar
(c) Maithili Sharan Gupt (d) Chinnaswami Subramania Bharati
14. She was a revolutionary and actively participated in the Indian Independence Movement. She was affectionately known as Gandhi Buri (Bengali for Old Lady Gandhi). She led a procession of 6000 protestors, mostly women as a part of the Quit India Movement. She kept chanting Vande Mataram (Hail to the Motherland) during her last moments.
- Who among the following personalities is associated with the above description ?
- (a) Sarojini Naidu (b) Matangini Hazra
(c) Sucheta Kripalani (d) Vijaya Lakshmi Pandit

EXPLANATIONS

1. (a)

Statement 1 is correct and Statement 2 is not correct.

- Recently, the West Bengal Assembly passed a resolution declaring Banglar mati, Banglar jol as the state anthem.
- In 1905, Curzon** partitioned Bengal on communal lines. The partition drew unanimous criticism from nationalist politicians and eventually sparked the **Swadeshi Movement**.
- Banglar mati, Banglar jol** was written by **Rabindranath Tagore in 1905** during **partition of Bengal**.
- The song calls for unity for all Bengalis by invoking the beauty of Bengal — its natural environs, its language, its people, and its soul.

2. (b)

Pair 1 is correctly matched: Longpi Pottery

- Named after the village of **Longpi in Manipur**. The **Tangkhul Naga tribes** practice this exceptional pottery style.
- Unlike most pottery, Longpi does not resort to the potter's wheel. All shaping is done **with the hand** and with the **help of molds**.



Pair 2 is not correctly matched: Araku Valley Coffee

- Araku Valley Arabica Coffee is from the **picturesque Araku Valley in Andhra Pradesh**.

- It is produced organically and boasts a distinguished reputation for its rich flavor, invigorating aroma, and unmatched purity.

Pair 3 is not correctly matched: Sheep Wool Stoles

- **Bodh, Bhutia and Gujjar Bakarwal tribes** from Himachal Pradesh/Jammu & Kashmir exhibit their ingenuity with pure sheep wool, fashioning a diverse range of apparel, from jackets to shawls and stoles.
- Sheep wool threads are woven into intricate **diamond, plain, and herringbone patterns**. Originally they were made in monochromatic colors white, black, and gray, however dual-colored designs now dominate.



Pair 4 is correctly matched: Meenakari is an art of decorating metal surfaces with vibrant mineral substances, a technique **introduced by the Mughals**, it is an art of Rajasthan. Delicate designs are etched onto metal, creating grooves for colors to nestle in. Each hue is fired individually, creating intricate, enamel-adorned pieces.

3. (b)

Statement 1 is not correct: Hyderabad city was founded in the year **1591** by **Mohammed Quli Qutub Shah**, the **fifth sultan of Qutb Shahi dynasty**.

- Hyderabad's fame, strategic location and Golconda's legendary wealth attracted **Aurangzeb** who captured Golconda in **1687**.
- As the Mughal empire decayed and began to disintegrate, the viceroy, **Asaf Jah I proclaimed himself the Nizam** and established the independence rule of the Deccan.
 - Hyderabad once again became a major capital city, **ruled by successive Nizams of the Asaf Jahi dynasty**.
 - **Eighty five percent of the Nizam's subjects were Hindus**.
 - **Statement 2 and 3 are correct:** In **1798**, a **subsidiary alliance** for **military and political cooperation** was signed between the Nizam of Hyderabad and the British East India company.

Operation Polo: It was the **police action launched by the Indian Army** on September 13, 1948, to integrate the princely state of Hyderabad.

- This operation was named "Operation Polo" and it is also referred to as "**Operation Caterpillar**" at times.
- The Nizam's forces **surrendered to the Indian Army by September 18**.

4. (a)

Statement 1 is correct: The Nizam nominated a three-member team to negotiate a **Standstill Agreement**, which was signed on November 29, 1947 by **Governor General Lord Mountbatten** and **Nizam Osman Ali Khan**.

Statement 2 and 3 are not correct: It had following features:

- It is **valid for one year**;
- **Foreign Affairs, Defence and Communications were under India's control**;
- **Domestic affairs were under Nizam's control**

5. (b)

Santiniketan is inscribed on the **UNESCO World Heritage** List.

- **Location:** Santiniketan, popularly known today as a university town, is located in the **Birbhum district in West Bengal**.
- **Rivers:** The area is flanked on two sides by the rivers, the Ajay and the Kopai.

History

- Santiniketan was earlier known as **Bhubadanga**. It was established by **Maharshi Debendranath Tagore in 1862**, and later expanded by his son, **Rabindranath Tagore**.
- In **1901**, Rabindranath Tagore chose a vast tract of land and started a school on the '**Brahmacharya Ashram**' modeled on the ancient Indian Gurukul system. The school was upgraded to a University and was renamed **Visva Bharati in 1921**.
- In **1951**, Visva Bharati was declared to be a **central university** and an institute of national importance.

6. (a)

Statement 1 is correct and Statement 2 is not correct.

The Chennakeshava temple

- **Location:** The Chennakeshava temple is located on the banks of the **Yagachi River (a tributary of Hemavati River)** in **Belur, Karnataka**.
- **Ruler:** It commenced during the reign of **king Vishnuvardhana of the Hoysala dynasty in 1117 CE** to commemorate his victory over the Cholas. It took 103 years to complete.
- **Architecture:** The temple **stands 37 meters tall** at its highest. Its outer walls are adorned with finely done artwork, with dancing girls in various postures and animals like **horses, elephants and lions**.

7. (a)

'Samvatsari' and 'Pratikraman' are the religious practices followed in Jainism.

- Samvatsari is observed with prayers, rituals, and fasting, and it is a time for **Jains** to reaffirm their commitment to living a life of non-violence, truth, and righteousness.
 - It is a day of reflection, atonement, and reconciliation within the Jain community.
 - It marks the **conclusion of the Paryushan festival, one of the most important annual events in Jainism**, which lasts for eight days among the Shwetambars and ten days among the Digambars.
- **Pratikraman (Pra=return and atikraman=violation)** means returning from violations. It is realising what we have done wrong and annotating on it.

8. (a)

Nuakhai festival of west Odisha is observed on **panchami tithi (fifth day) of lunar fortnight of Bhadrava (August-September)**, the day after Ganesh chaturthi.

- Agriculture is the main source of living for a bulk of the inhabitants of Odisha. The important and main tribes of Odisha like **Binjhal, Bhumia, Gond, Kondh, Mirdha, Saura / Savara**, etc. are at the moment settled agriculturists.
- Nuakhai is an **agricultural festival of both the tribal people as well as the caste-Hindus**.

9. (c)

Both the Statements are correct.

- The Sacred Ensembles of Hoysalas have been added to the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage list during the 45th session of the World Heritage Committee at Riyadh, Saudi Arabia.
- The sacred ensembles of the Hoysalas, constructed during the **12th and 13th centuries** are represented by the three components of the Chennakeshava temple at Belur, Hoysaleswara temple at Halebidu and Keshava temple at Somanathapur.

The Keshava temple

- **Location:** The Keshava temple at Somanathapur is located in Mysuru district.
- **Ruler:** It was commissioned by **Somanatha Dandanayaka** during the regime of **Narasimha III in 1268 CE**.
- **Trikuta Temple** is dedicated to Lord Krishna in three forms – Janardhana, Keshava and Venugopala.
- **Architecture:** The Keshava temple is built on a raised platform with an outer Pradakshina pathway. The temple has a **stellar plan** with three shrines and Vimanas. The walls are covered in beautiful friezes of scenes from the epics, figures of elephants and battle scenes depicting cavalry.

10. (a)

In News : Bharatanatyam dancer Saroja Vaidyanathan died at her residence.

Statements 1 and 2 are correct : Bharatanatyam of Tamil Nadu in southern India has grown out of the art of dancers dedicated to temples, and was earlier known as **Sadir or Dasi Attam**.

- It is a popular classical dance form in South India.
- It is the first of India's traditional dances to be **refashioned** as a **theatre art** and to be exhibited widely **both at home and abroad**.
- The music of Bharatanatyam belongs to the **Carnatic system of southern India**.

Statement 3 is not correct : Bharatanatyam is performed **both by male and female artists**. However, the majority of the artists are female.

- **Solo/Group:** Bharatanatyam may be performed both solo or in a small group.

11. (b)

Adi Shankaracharya is credited with **establishing the Advaita Vedanta School of Hindu philosophy**.

- He composed 72 devotional and meditative hymns like **Soundarya Lahari, Sivananda Lahari, Nirvana Shalkam, Maneesha Panchakam**. He also wrote 18 commentaries on the major scriptural texts including the Brahma Sutras, the Bhagavad Gita and 12 major Upanishads.
- He also authored 23 books on the fundamentals of the Advaita Vedanta philosophy which expound the **principles of the non-dual Brahman**. These include **Viveka Chudamani, Atma Bodha, Vaakya Vritti, Upadesa Sahasri**, among others.

12. (a)

Toto is a Sino-Tibetan language spoken by the **tribal Toto people** and is written in the Bengali script.

- Toto is a **small tribal community** having a population of only 1,632 people living in **Toto Para in Alipurduar district of West Bengal**, near the India-Bhutan border, and speaking the **eponymous language**.

13. (d)

In News : The Union Minister for Education and Skill Development & Entrepreneurship recently launched a **two-day Bharatiya Bhasha Utsav and Technology & Bharatiya Bhasha Summit**, at **New Delhi**.

- The Government of India has proposed to **celebrate the birthday of renowned Tamil poet and freedom fighter Mahakavi Chinnaswami Subramania Bharati as Bharatiya Bhasha Divas (11 December)**.

14. (b)

Matangini Hazra was a revolutionary and actively participated in the Indian Independence Movement.

- She was affectionately known as **Gandhi Buri (Bengali for Old Lady Gandhi)**.
- In 1905, she became actively interested in the Indian independence movement **as a Gandhian**.
- She took part in the **Non-Cooperation Movement** and protested for the **abolition of salt tax** as a part of the civil disobedience movement.
 - It was during this time that she became an active member of the **Indian National Congress**, and started spinning her own khadi in Gandhi's footsteps.
 - She led a procession of 6000 protestors, mostly women as a part of the **Quit India Movement**.
- She kept chanting **Vande Mataram (Hail to the Motherland)** during her last moments.

INDIAN SOCIETY

1. With reference to Jal Jeevan Mission, consider the following statements:
 1. It aims to provide tapped drinking water to all rural households by 2024.
 2. Goa has become the first state to provide tap connections in all rural areas.
 3. The Ministry of Jal Shakti is the nodal Ministry for the implementation of the scheme.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
2. Schemes like SMILE and PM-DAKSH in India are related to which of the following:
 - (a) Children
 - (b) Transgenders
 - (c) Women
 - (d) Scheduled Caste and Scheduled Tribes

EXPLANATIONS

1. (d)

All Statements are correct: Jal Jeevan Mission aims to provide drinking water to all rural households by 2024. It also aims to provide 55 litres of tap water per person per day to every rural household by 2024. The Ministry of Jal Shakti is the nodal Ministry for the implementation of this scheme.

- Goa has become the **first 'Har Ghar Jal' certified** state in the country as it successfully provided 100 per cent functional household tap connections (FHTCs) in the rural areas covering 2.30 lakh rural households.
- Dadra & Nagar Haveli and Daman & Diu became the **First 'Har Ghar Jal' Certified UT** in the Country.

2. (b)

Initiatives for Transgenders in India:

- **National Education Policy 2020:** It provides for setting up a Gender Inclusion Fund (GIF) especially for girls and transgender students to build the nation's capacity to provide equitable quality education for all girls as well as transgender students.
- **Support for Marginalised Individuals for Livelihood and Enterprise (SMILE):** It is for Comprehensive Rehabilitation for Welfare of Transgender Persons and Comprehensive Rehabilitation of persons engaged in the act of Begging.
- **PM-DAKSH (Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi) Yojana:** It is a National Action Plan for skilling of marginalised persons covering SCs, OBCs, EBCs, transgender, DNTs, Sanitation workers including waste pickers.
- **Garima Greh:** It is to provide shelter to Transgender persons with basic amenities like shelter, food, medical care and recreational facilities.

GEOGRAPHY

1. Pulau Semakau Island, recently seen in the news, is located in:
(a) Ecuador (b) Gabon
(c) Singapore (d) Afghanistan
2. With reference to the Cauvery river of India, consider the following statements:
 1. It originates from the Brahmagiri Range of hills in the Western ghats.
 2. It flows through the Mekedatu, a wide gorge on the river.
 3. The Mettur Dam is located on it in the state of Karnataka.
 4. Noyil, Harangi, and Hemavati are tributaries of it.How many of the above pairs are correctly matched?
(a) Only one (b) Only two
(c) Only three (d) All fours
3. Arrange the following places in correct order as they would appear from South to North on Map:
 1. Donetsk 2. Luhansk
 3. Zaporizhzhia 4. KhersonSelect the correct answer using the code given below:
(a) 2-1-3-4 (b) 2-3-4-1
(c) 4-1-3-2 (d) 4-3-1-2
4. With reference to Vietnam, consider the following statements:
 1. It shares its land border with four countries.
 2. The Gulf of Tonkin separates the strategic Hainan province of China with Mainland Vietnam.
 3. Its capital Hanoi lies in the northern part while the famous Mekong river flows from the southern part of the country.How many statements given above are correct?
(a) Only one (b) Only two
(c) All three (d) None
5. The Batagaika crater, sometimes mentioned in the news, is located in which of the following countries?
(a) Mongolia (b) China
(c) Russia (d) Kazakhstan
6. Kilauea volcano, recently seen in the news, is located in which of the following islands?
(a) Puerto Rico (b) Cocos Island
(c) Hawaii (d) Solomon Islands

7. Primorsky Krai, recently seen in the news, is located in which of the following countries?
- (a) China (b) Ukraine
(c) Russia (d) Netherlands
8. Consider the following pairs:
- | Tunnel | State |
|----------------------|-------------------|
| 1. Nechiphu Tunnel | Arunachal Pradesh |
| 2. Sela Tunnel | Himachal Pradesh |
| 3. Shinkun La Tunnel | Sikkim |
- How many of the above pairs are correctly matched?
- (a) Only one pair (b) Only two pairs
(c) All three pairs (d) None of the pairs
9. With reference to the Bagmati river, consider the following statements:
1. It is a transboundary river between China and India border.
 2. It originates in Tibet, north of the Himalayas.
 3. The Pashupatinath Temple, an important Hindu pilgrimage site dedicated to Shiva is located on the banks of the river.
- Which of the statements given above are not correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
10. Which of the following groups of African countries borders the Mediterranean sea?
- (a) Morocco, Algeria, Tunisia, Libya, Egypt
(b) Algeria, Chad, Tunisia, Niger, Egypt
(c) Morocco, Tunisia, Niger, Mali, Egypt
(d) Algeria, Sudan, Libya, Tunisia, Egypt
11. With reference to the Mana Village, consider the following statements:
1. It is located in Chamoli district in Uttarakhand.
 2. It shares the border with Nepal.
 3. It is located on the banks of the River Saraswati.
- How many statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
12. Which of the following countries are members of the European Union (EU)?
1. Austria
 2. Sweden
 3. Finland
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3

- 13.** With reference to the new Pamban bridge, which of the following statements is/are correct?
1. The bridge is India's first ever vertical lift sea bridge.
 2. The bridge will connect the town of Mandapam in mainland India with Rameswaram on Pamban Island.
- Choose the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 14.** With reference to the river Cauvery, which of the following statements is/are correct?
1. The River rises at Talakaveri in the Brahmagiri range in the Western Ghats, Karnataka.
 2. River Pranhita and Purna are the major tributaries of the 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
- 15.** With reference to the Gurez valley, which of the following statements is/are correct?
1. It is located close to the Line of Control (LoC) in north Kashmir.
 2. The Kishanganga River flows through the valley.
- 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)

In News: Singapore's only landfill is located in Pulau Semakau Island, which is projected to be filled in a decade.

- It is located approximately 8 km south of **Singapore**.
- It is home to coral reefs, mangroves and rare birds like Great-billed Herons.

2. (c)

Statement 1 is correct: The **River Cauvery** originates at **Talakaveri** in **Coorg District** of **Karnataka** in **Brahmagiri Range** of hills in the **Western ghats**.

- It is an inter-state basin that covers **Karnataka, Tamil Nadu, Kerala and the Union Territory of Pondicherry** before draining into the Bay of Bengal.

Statement 2 is correct: At **Shivanasamudram**, the river branches off into two parts and falls through a **series of falls and rapids**, which is utilised for power generation.

- The two branches of the river join after the fall and flow through a wide gorge which is known as '**Mekedatu (Goats leap)**'.

Statement 3 is not correct: **Dams and Reservoirs located on Cauvery are**

- The Harangi and Hemavati dams in Karnataka.
- The Krishna Raja Sagar Dam on the main Kaveri River in Karnataka.
- The Kabini Reservoir in Karnataka which joins the Krishna Sagar Reservoir.
- **The Mettur Dam on the Kaveri in Tamil Nadu.**

Statement 4 is correct: **Tributaries:** Bhavani, **Noyil**, Amaravathi, **Harangi**, **Hemavati**, Kabini,, Lakshmana Tirtha, and Arkavati.

3. (d)



4. (b)

Statement 2 and 3 are correct.

- Vietnam is situated on the eastern part of the Indo-chinese Peninsula with a coastline along the South China Sea. It borders **China in the north**, it has a long border with **Laos**, and it borders **Cambodia in the southwest**. Vietnam shares **maritime borders** with Indonesia, Malaysia, the Philippines, and Thailand. **Hence, Statement 1 is not correct.**
- The Gulf of Tonkin separates the strategic Hainan province of China with Mainland Vietnam. **Hence, Statement 2 is correct.**



- Its capital Hanoi lies in the Northern part while the famous Mekong river flows from the southern part of the country. Two of Vietnam's largest rivers, the **Mekong in the south and the Red in the north**, end at the South China Sea in huge swampy plains called deltas. These regions are home to most of the country's people and provide fertile ground to grow rice and many other crops. **Hence, Statement 3 is correct.**

5. (c)

The Batagaika crater, **scientific name 'mega-slump'**, is located in the Sakha Republic in **Russia**, and reaches depths of up to 100 m.

- It is known as the **'gateway to the underworld'** in Russia's Sakha Republic.

Impact of Thawing:

- Russia is warming **at least 2.5 times faster than the rest of the world**, melting the long-frozen tundra that covers about 65% of the country's landmass and **releasing greenhouse gases** stored in the thawed soil.
- The thawing permafrost **causes significant infrastructural damage** like buckling roadways, splitting houses, and disrupting pipelines.

6. (c)

Kīlauea Volcano, a shield and active volcano, located on the eastern slope of Mauna Loa Volcano in a closed area of **Hawaii Volcanoes National Park, Kilauea**.

- It is the second youngest product of the Hawaiian hotspot and the current eruptive centre of the **Hawaiian–Emperor seamount chain**.
- In 2019, a string of earthquakes and major eruption at Kilauea led to the massive destruction.



7. (c)



8. (a)

Pair 1 is correctly matched and Pair 2 and Pair 3 are not correctly matched.

Nechiphu Tunnel

- It is the **500-meter** long Nechiphu Tunnel on **Balipara-Charduar-Tawang Road** in **Arunachal Pradesh**.

Sela Tunnel

- Sela Tunnel is an under-construction road tunnel at **3,000 meters (9,800 ft)** which will ensure all-weather connectivity between Guwahati in Assam and Tawang in the Indian state of **Arunachal Pradesh**.

Shinkun La Tunnel

- BRO will soon complete construction of Shinkun La Tunnel, the world's highest tunnel at an altitude of 15,855 feet.
- The tunnel will **connect Lahaul-Spiti in Himachal to the Zaskar Valley in Ladakh** and provide all weather connectivity.

9. (a)

Bagmati River is a **transboundary river between Nepal and India border**.

- Origin:** Shivapuri Hills to the north of Kathmandu, Nepal.
- Located on the river's edge, **the Pashupatinath Temple** is an important Hindu pilgrimage site dedicated to Shiva.

10. (a)

Chad, Niger, Mali and Sudan do not have borders with the Mediterranean coast.



11. (b)

Statement 1 is correct: Mana is located in **Chamoli district in Uttarakhand**.

Statement 2 is not correct: It shares a border with **China** and was previously referred to as the “last village” but is now referred to as the “first Indian village”.

Statement 3 is correct: It is located on the **banks of the River Saraswati**, just 3 km away from the town of **Badrinath**, making it one of the best tourist attractions in the region.

12. (d)

Recently, France and Germany pushed new proposals for the enlargement of the European Union. The European Union is a group of 27 countries in Europe.

- These countries came together to make things better, easier and safer for people.



13. (c)

Both Statements 1 and 2 are correct.

- New Pamban Bridge is a railway sea bridge **connecting the town of Mandapam in mainland India with Rameswaram on Pamban Island.**
- The bridge with a length of **2.05 km** is **India's first ever vertical lift sea bridge.**
- The construction of the new bridge was started in 2019. It is being built by Rail Vikas Nigam Limited.

14. (a)

Statement 1 is correct and 2 is not correct.

Statement 1 is correct: The River rises at Talakaveri in the Brahmagiri range in the Western Ghats, Kodagu district of Karnataka.

Statement 2 is not correct: River Pranhita and Purna are tributaries of the river **Godavari**.

River Cauvery

- **Basin:** The river basin covers Tamil Nadu, Karnataka, Kerala and Puducherry. However it flows through only the states of Karnataka and Tamil Nadu and drains into the Bay of Bengal.
- The Cauvery River is the **third largest river** in southern India after Godavari and Krishna.
- **Tributaries:** Harangi, Hemavati, Kabini, Bhavani, Lakshmana Tirtha, Shimsha, Noyyal, Amaravati and Arkavati.
- **Dams:** Krishna Raja Sagara Dam, Mettur Dam, Banasura Sagar Dam, Harangi Dam etc.

15. (c)

Both the statements are correct.

[IN NEWS] The high-altitude passes of the **Gurez valley, in north Kashmir** is set to connect with the **Mushkoh valley, in Kargil's Drass Sector, Ladakh**, the site of the **Kargil war in 1999**.

Gurez valley

- **The Gurez valley** is close to the Line of Control (LoC) **in north Kashmir**, situated at about 2,400 meters above sea level.
- The **Kishanganga River** flows through the valley.
- It is also home to **ibex, musk deer and marmots, Himalayan brown bear and snow leopard**.
- The Gurez valley is one of few habitations in Kashmir where villages with only log houses exist, with no intervention of urban concrete materials.

INDIAN POLITY AND CONSTITUTION

1. Consider the following statements:
 1. As per Article 85(1), the Speaker summons each House of Parliament from time to time.
 2. By convention, Parliament meets for three sessions in a year.
 3. The parliamentary year ends with the Budget Session.How many of the statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
2. Mitakshara law recently seen in the news, it is related to which of the following ?
 - (a) Succession and inheritance of property
 - (b) Principal methods of revenue collection
 - (c) Tax levied on the carbon emissions
 - (d) Sexual Harassment at Workplace
3. Which of the following states are entitled for “special” provisions under Article 371?
 1. Nagaland
 2. Maharashtra
 3. Sikkim
 4. KeralaSelect the correct answer using the code given below:
 - (a) 1 only
 - (b) 1 and 2 only
 - (c) 1, 2 and 3 only
 - (d) 2, 3 and 4 only
4. Which of the following are exempted under Right to Information (RTI) Act 2005 ?
 1. Research and Analysis Wing
 2. Directorate of Enforcement
 3. Narcotics Control Bureau
 4. Border Security Force
 5. National Security GuardSelect the correct answer using the code given below:
 - (a) 1, 2 and 5 only
 - (b) 1, 3 and 4 only
 - (c) 2 and 5 only
 - (d) 1, 2, 3, 4 and 5
5. Autonomous District Councils come under which of the following schedules of Indian Constitution?
 - (a) Fourth Schedule
 - (b) Sixth Schedule
 - (c) Tenth Schedule
 - (d) Seventh Schedule
6. Consider the following statements regarding the “Right to Repair” in India:
 1. India is the first country in the world to set up the ‘Repairability Index’ on 5 categories of electronic devices.

2. Government has set up a Right to Repair portal that allows citizens to get their gadgets and vehicles repaired without losing warranty.

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. The 'Jhaveri Commission', sometimes mentioned in the news, is related to:

- (a) Same Sex Marriage (b) OBC Reservation
(c) State Reorganisation (d) Uniform Civil Court

8. Consider the following pairs:

States

1. Nagaland
2. Manipur
3. Mizoram

Articles

- Article 371A
Article 371C
Article 371G

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

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

9. Which of the following is mentioned in Article 1 of the Indian Constitution?

1. Names of country
2. National Flag of India
3. Territories of the States

Select the correct answer using the code given below:

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

10. Consider the following subjects:

1. Agriculture
2. Forests
3. Economic and Social Planning
4. Protection of wild animals and birds

How many of the above are listed as the 'Concurrent List' of Schedule VII of Indian Constitution?

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

11. Consider the following statements, with reference to Voter Verifiable Paper Audit Trail (VVPAT) machines:

1. In 2013, the Conduct of Elections Rules, 1961, were amended to use VVPATs along with EVMs.
2. They were used for the first time in the 2019 Lok Sabha elections.
3. They can be assessed by both the voter and polling officials.

Which of the statements given above is/are correct?

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

- 12.** Reasonable restrictions on the exercise of the freedom of expression and speech under Article 19 of the Indian Constitution can be imposed in the interests of which of the following?
1. Sovereignty and integrity of India
 2. The security of the State
 3. Friendly relations with foreign states
 4. Public order
 5. Contempt of court
- Select the correct answer using the code given below:
- | | |
|------------------------|----------------------|
| (a) 1, 2, 3 and 5 only | (b) 1, 3 and 4 only |
| (c) 2, 4 and 5 only | (d) 1, 2, 3, 4 and 5 |
- 13.** With reference to the collegium system, which of the following statements is/are correct?
1. It is mentioned under Article 124 of the Constitution.
 2. Second and Third Judges Case judgments are related to the evolution of the collegium system.
- Select the correct answer using the code given below:
- | | |
|------------------|---------------------|
| (a) 1 only | (b) 2 only |
| (c) Both 1 and 2 | (d) Neither 1 nor 2 |
- 14.** With reference to the International Day of Democracy, consider the following statements:
1. It is celebrated on the 15th of September every year around the world.
 2. It was established through a resolution passed by the UN General Assembly in 2007.
 3. The theme for 2023 was 'strengthening the voices of citizens'.
- How many statements given above are correct?
- | | |
|---------------|--------------|
| (a) Only one | (b) Only two |
| (c) All three | (d) None |
- 15.** With reference to Old Parliament House, consider the following statements:
1. It was designed by British architects Edwin Lutyens and Herbert Baker.
 2. It was inaugurated in January 1927 by Viceroy Lord Reading.
- 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.** Which of the following would require ratification of states in order to be amended?
1. If there is a change in the provisions regarding elections to the post of the President of India.
 2. If there is any change in the provisions regarding the Union Judiciary or the High Courts.
 3. If Article 368 itself is amended.
- Select the correct answer using the code given below:
- | | |
|------------------|----------------|
| (a) 1 and 2 only | (b) 2 only |
| (c) 3 only | (d) 1, 2 and 3 |

17. Which of the following statements is **not** correct regarding the Mediation Act, of 2023?
- It enables disputing parties to resolve their differences amicably, without the intervention of courts.
 - The Act will require courts and relevant institutions to maintain a panel of mediators.
 - It does not prescribe any time limit to complete the mediation process.
 - All are correct.

EXPLANATIONS

1. (a)

Statements 1 and 3 are not correct.

- Article 85(1)** says, the President shall from time to time summon each House of Parliament.
- India **does not have a fixed parliamentary calendar**. By convention, Parliament meets for three sessions in a year. Hence, Statement 2 is correct.
- The parliamentary year ends with a **three week-long Winter Session**, which is held from November to December.
- The Budget Session starts towards the end of January**, and concludes by the end of April or first week of May.

2. (a)

In News : The Supreme Court held that a child born of a void or voidable marriage can inherit the parent's share in a joint Hindu family property governed by the **Mitakshara law**. The Mitakshara school of Hindu law codified as the **Hindu Succession Act, 1956** governed **succession and inheritance of property** but only recognised males as legal heirs.

- The law applied to everyone who is not a Muslim, Christian, Parsi or Jew by religion.
- Buddhists, Sikhs, Jains and followers of Arya Samaj, Brahmo Samaj are also considered Hindus for the purposes of this law.
- Women were recognised as coparceners or joint legal heirs for partition arising from **2005**.

3. (c)

Special provisions U/A 371

- Article 371 enumerates "special" provisions for various states.
- Clauses A to J** under Article 371 incorporate a bundle of **special provisions for the northeastern states**, including **Manipur, Assam, Nagaland, Arunachal Pradesh, Sikkim and Mizoram**, as well some other states, including **Goa, Maharashtra, Gujarat, Karnataka and Andhra Pradesh**.
- Article 371 includes a **wide range of specific safeguards**, including protection of **customary rights, land and boundaries, that are deemed important for these states**.

4. (d)

In News : Some activists observed that the Right to Information act has been weakened over the years.

The Right to Information (RTI) Act was enacted by Parliament in **2005**.

- It empowers Indian citizens to seek accessible information from a Public Authority and makes the Government and its functionaries more accountable and responsible.
- It mandates timely response within **30 days to citizen requests for government information**.
- Section 24 of the RTI Act** provides that the Act does not apply to the security and intelligence organisations specified in the Second Schedule of the Act.

- And these are Intelligence Bureau, **Research and Analysis Wing, Directorate of Enforcement, Narcotics Control Bureau, Border Security Force**, Central Reserve Police Force, Indian Tibetan Border Police, Central Industrial Security Force, **National Security Guard**, Assam Rifles, and agencies specified by the state governments through a notification will be excluded from providing information. The exclusion, however, is not absolute and these organisations have an obligation to provide information pertaining to allegations of corruption and human rights violation.

5. (b)

Sixth Schedule of the Constitution

- The Sixth Schedule was adopted under **Article 244** of the Constitution with provisions for formation of autonomous administrative divisions within a state.
 - These divisions, in the form of ADCs, were granted certain **legislative, judicial and administrative autonomy** within the state.
 - The aim of the provision is to **allow tribal populations to govern themselves**.
- **Composition:** According to the Sixth Schedule, the ADCs administering a region within a state have **30 members** with a **term of five years**.
 - **The Bodoland Territorial Council** in Assam is an exception to this with more **than 40 members** and rights to make laws on **39 issues**.
- **Jurisdiction:** ADCs can make laws, rules and regulations with regard to land, forest, water, agriculture, village councils, health, sanitation, village and town level policing, inheritance of property, marriage and divorce, social customs, and mining, among other issues.
 - ADCs also have **powers to form courts to hear cases** where both parties are members of Scheduled Tribes and the maximum sentence is less than **5 years in prison**.

6. (b)

'Right to Repair' in India

- **Framework Committee:**
 - The **Ministry of Consumer Affairs (MCA)** has set up a committee to come up with a Right to Repair framework.
 - The framework is significant as it will give consumers a chance to repair their products at an optimal cost instead of buying new products altogether.
 - The important sectors for the initial focus of the framework are **farming equipment, mobile phones & tablets, consumer durables, automobiles & automobile equipment**.
- **Portal:**
 - The Ministry of Consumer Affairs (MCA) has also set up a **Right to Repair portal** that allows citizens to get their gadgets and vehicles repaired without losing warranty. **Hence statement 2 is correct.**
 - The portal aggregates all the public information related to products, service, warranty, terms and conditions, etc.

'Repairability Index'

- France is the first major country in the world to set up the 'Repairability Index' on 5 categories of electronic devices. **Hence statement 1 is incorrect.**

7. (b)

About Jhaveri Commission

- As per the directions of the Supreme Court, the Gujarat government appointed former Chief Justice of Orissa High Court K.S. Jhaveri, **as a one-man committee to fix reservation for OBC communities** in the elections to local bodies.

- To study the report, submitted by the Commission, a **cabinet sub-committee** was formed by the state government which has accepted the recommendations of the cabinet sub-committee in public interest.
- The decision on reservations, in Gujarat, is based on the report of the **Jhaveri Commission Panel**, headed by K S Jhaveri, a retired Chief Justice of the Orisha High Court.
 - The panel was **formed to decide on the OBC reservation in local bodies of the state** like gram panchayats, taluka panchayats, district panchayats, municipalities, and municipal corporations.

8. (d)

In News: The Mizoram Assembly unanimously passed a resolution opposing the **Forest (Conservation) Amendment Act, 2023**, “to **protect the rights and interest of the people of Mizoram**”.

- Special constitutional protections, such as **Article 371A for Nagaland and 371G** for Mizoram, prohibit the application of any law enacted by Parliament that impinges on Naga and Mizo customary law and procedure, and ownership and transfer of land and its resources.
- Such laws can be extended to these States only if their Legislative Assemblies decide thus in a resolution.
- Manipur is covered under **Article 371C** with respect to its culture, land rights, and administration

9. (c)

Article 1, Constitution of India 1950

- India, that is Bharat, shall be a Union of States.
- The States and the territories thereof shall be the States and their territories specified in Parts A, B and C of the First Schedule.
- The territory of India shall comprise —
 - the territories of the States;
 - the territories specified in Part D of the First Schedule; and
 - such other territories may be acquired.

10. (c)

‘Forests’, ‘Protection of wild animals and birds’, and ‘Economic and Social Planning’ are mentioned in the **Concurrent List (List III)** of the Schedule VII of Indian Constitution.

- However, **Agriculture**, including agricultural education and research, protection against pests and prevention of plant diseases is mentioned in the **State List (List II)** of the Schedule VII of Indian Constitution.

11. (a)

in News: A petition from the Association for Democratic Reforms (ADR) has sought 100% counting of **Voter Verifiable Paper Audit Trail (VVPAT)** slips.

Statement 1 is correct : **VVPAT** is an independent system attached with the Electronic Voting Machines that allows the voters to verify that their votes are cast as intended.

- The idea of an additional layer of transparency for the satisfaction of voters in the form of a ‘voter verifiable paper trail’ was suggested by the political parties in a meeting taken by the ECI on 4th October, 2010.
 - In 2013, the **Conduct of Elections Rules, 1961**, were amended to use **VVPATs along with EVMs**.

Statements 2 and 3 are not correct : VVPATs with EVMs were used for the **first time in a bye-election from 51-Noksen (ST) assembly constituency** of Nagaland in 2013 after which the EC decided to introduce VVPATs in a phased manner.

- From June 2017, **100% of VVPATs** began to be used in polls, and the **2019 Lok Sabha elections** became the first general election to have 100% of EVMs being attached to VVPATs.
- The machines can be accessed, though, by the **polling officials and not by the voter.**

12. (d)

Article 19(1)(a) of the Constitution reads : All citizens shall have the right to a freedom of speech and expression.

- Thus all Indian citizens enjoy a constitutional right to give free expression to their views, opinions and convictions.
- **Article 19(2)** says that the **State can impose reasonable restrictions** on the exercise of the freedom of expression and speech **in the interests of:**
 - sovereignty and integrity of India;
 - the security of the State;
 - friendly relations with foreign states;
 - public order; decency or morality;
 - contempt of court;
 - defamation and incitement to an offence.

13. (b)

About the Collegium System:

- There is **no such law or constitutional provision that mentions or defines the collegium system. Hence, Statement 1 is not correct.**
- It is a mechanism invented by the judiciary for the appointment and transfer of judges, through **Second and Third Judges Case judgments. Hence, Statement 2 is correct.**
- It is **headed by the CJI and comprises 4 other senior-most judges** of the court. An HC collegium is led by its Chief Justice and four other senior-most judges of that court.
- **Article 124(2)** says: "Every Judge of the Supreme Court shall be appointed by the **President** by warrant under his hand and seal after consultation **with such Judges of the Supreme Court and of the High Courts in the States as he may deem necessary.**"

14. (b)

The International Day of Democracy is celebrated around the world **on 15 September each year. Hence, Statement 1 is correct.**

- It was established through a resolution passed by the **UN General Assembly in 2007**, encouraging governments to strengthen and consolidate democracy.
- The International Day is an **opportunity to review the state of democracy around the world.** Each year highlights a specific theme. **Hence, Statement 2 is correct.**
- **Theme 2023: "Empowering the next generation,"** focuses on young people's essential role in advancing democracy and ensuring that their voices are included in the decisions that have a profound impact on their world. Hence, **Hence, Statement 3 is not correct.**

15. (a)

Statement 1 is correct: The Old Parliament building was designed by British architects **Edwin Lutyens** and **Herbert Baker** and was constructed between **1921 and 1927.**

- The foundation stone was laid by HRH Prince Arthur, Duke of Connaught and Strathearn, in 1921.

Statement 2 is not correct: It was inaugurated in January 1927 by **Viceroy Lord Irwin** as the seat of the Imperial Legislative Council.

- The **third session of the Central Legislative Assembly** was held in this house on 19 January 1927.
- Following the British withdrawal from India, it was taken over by the Constituent Assembly of India, and then by the Indian Parliament after India's Constitution came into force on **26 January 1950**.

16. (d)

Constitutional amendments that require ratification by States

- The Constitutional provisions that require ratification in order to be amended are specifically listed in the proviso to Article 368(2) and **pertain to the federal structure of the Constitution**.
- They are commonly referred to as 'entrenched provisions' and are as follows—
 - If there is a change in the provisions regarding elections to the post of the President of India (Article 54 and 55).
 - If there is a change in the extent of the executive power of the Union or the State governments (Article 73 and 162).
 - If there is any change in the provisions regarding the Union judiciary or the High Courts. (Articles 124–147 and 214–231).
 - If the distribution of legislative and administrative powers between the Union and the States is affected (Article 245 to 255).
 - If any of the Lists in the Seventh Schedule is affected.
 - If the representation of the States in the Parliament is changed (Article 82).
 - If Article 368 itself is amended.

17. (c)

The Mediation Act, 2023

- **About:** The Act enables disputing parties to resolve their differences amicably, without the intervention of courts. **Hence, statement (a) is correct.**
- **Mediation Agreement:** The Act requires every mediation agreement to be in writing, with the parties to the agreement agreeing to submit any dispute that may arise between them to mediation.
- **Pre-Litigation Mediation:** The Act permits parties to a dispute (regardless of whether they have executed a mediation agreement) to voluntarily and mutually refer their dispute to mediation prior to filing a suit or instituting proceedings before any court.
 - To facilitate this process, the Act will also **require courts and relevant institutions** to maintain a panel of mediators. **Hence, statement (b) is correct.**
- **Time Period:** Mediation proceedings under the Act must be completed within a period of 120 days from the date of the first appearance before the mediator, which may be extended for a maximum period of 60 days. **Hence, statement (c) is incorrect.**

INTERNATIONAL RELATIONS

1. Consider the following statements regarding the Organisation of the Islamic Cooperation (OIC):
 1. OIC was established by the First Islamic Summit Conference held in Morocco.
 2. It is the world's second largest multilateral body after the UN.
 3. India is neither a member nor an observer at OIC.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
2. With reference to the Association of Southeast Asian Nations (ASEAN), consider the following statements:
 1. Indonesia, Myanmar and Philippines are among the founding members of ASEAN.
 2. 8th of August is observed as the ASEAN Day.
 3. ASEAN summit is the highest decision making body and the summit is held once every year.How many statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
3. Which of the following countries are members of the India-Middle East-Europe Economic Corridor (IMEC)?
 1. India
 2. USA
 3. UAE
 4. Italy
 5. Saudi ArabiaSelect the correct answer using the code given below:
 - (a) 1, 2, and 3 only
 - (b) 1, 2, 3 and 4 only
 - (c) 2, 3, and 5 only
 - (d) All of the above
4. Which of the following statements is correct regarding the Group of Twenty (G20)?
 - (a) G20 members represent around 55% of the global GDP.
 - (b) G20 does not have a permanent secretariat.
 - (c) G20 was founded in 2008 after the Financial crisis.
 - (d) The G20 Summit is held every 2 years .
5. Which of the following are the founding members of the Association of Southeast Asian Nations (ASEAN)?
 1. Indonesia
 2. Myanmar
 3. Thailand
 4. Singapore

Select the correct answer using the code given below:

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

6. West Coast Refinery Project, an integrated refinery and petrochemical facility is jointly developed by India and which of the following countries?

- (a) Saudi Arabia (b) Iran
(c) Oman (d) Yemen

7. India is a part of which of the following frequently discussed forums?

1. ASEAN Plus Three or APT 2. East Asia Summit (EAS)
3. G7 (group of Seven) 4. Organisation of Islamic Cooperation (OIC)

Select the correct answer using the code given below?

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

8. Consider the following countries:

1. Canada
2. USA
3. Germany
4. South Korea
5. United Kingdom

Which of the above countries are part of 'Five Eyes intelligence Alliance'?

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

9. 'Five Eyes intelligence alliance' was recently in the spotlight due to Canada, which of the following countries are part of it?

1. Australia
2. New Zealand
3. India
4. Russia
5. France

Select the correct answer using the code given below.

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

EXPLANATIONS

1. (d)

Organisation of the Islamic Cooperation (OIC)

- **Establishment:**

- The Organisation of the Islamic Conference was established by the **First Islamic Summit Conference held in Morocco in 1969**, to marshal the Islamic world after an act of arson at the Al-Aqsa Mosque in Jerusalem by a 28-year-old Australian in 1969. It plunged the Middle East into its worst crisis after the 1967 Arab-Israeli war. **Hence, statement 1 is correct.**

- It was known as the Organisation of Islamic Conference until 2011.
- The Organisation of the Islamic Cooperation is the world's second largest multilateral body after the UN. **Hence, statement 2 is correct.**
- **Objective:**
 - The OIC's stated objective is "to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world".
- **Members & observers:**
 - It counts **57 members**, all of which are Islamic countries or Muslim majority members.
 - The Central African Republic, Russia, Thailand, Bosnia & Herzegovina, and the unrecognised Turkish Cypriot "state", have Observer status. **Hence, statement 3 is correct.**

2. (a)

Statement 1 is not correct: ASEAN was established in 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN: **Indonesia, Malaysia, Philippines, Singapore and Thailand.**

- Brunei Darussalam joined in 1984, followed by Viet Nam in 1995, Lao PDR and **Myanmar in 1997**, and Cambodia in 1999, making up the ten Member States of ASEAN.

Statement 2 is correct: ASEAN Day is on 8th August.

Statement 3 is not correct: ASEAN Summit: It is the **highest policy-making body** in ASEAN comprising the Head of States or Government of ASEAN Member States.

- It is **held twice annually** at a time to be determined by the Chair of the ASEAN Summit in consultation with other ASEAN Member States.
- The First ASEAN Summit was held in Bali, Indonesia in 1976.

3. (d)

Recently, the signing of an MoU on India-Middle East-Europe Economic Corridor (IMEC) was announced by Prime Minister Shri Narendra Modi after co-chairing a special event with the US President Mr. Joe Biden on Partnership for Global Infrastructure and Investment (PGII) and IMEC, on the sidelines of the G20 Summit in New Delhi.

- The IMEC comprises an Eastern Corridor connecting India to the Gulf region and a Northern Corridor connecting the Gulf region to Europe. It will include a railway and ship-rail transit network and road transport routes.
- **The MOU on IMEC was signed by India, USA, Saudi Arabia, UAE, European Union, Italy, France and Germany.**

4. (b)

The G20 members represent around **85% of the global GDP**, over 75% of the global trade, and about two-thirds of the world population.

- The Group does not have a permanent secretariat. The Presidency is supported by the Troika – previous, current and incoming Presidency.
- The G20 was founded in 1999 after the Asian financial crisis as a forum for the Finance Ministers and Central Bank Governors to discuss global economic and financial issues.
- The G20 Summit is held annually, under the leadership of a rotating Presidency.

5. (d)

The Association of Southeast Asian Nations (ASEAN)

- **Formation & members:**
 - On **8 August 1967**, five leaders – the Foreign Ministers of **Indonesia, Malaysia, the Philippines, Singapore and Thailand** – came together in Bangkok to form ASEAN.
 - The document that they signed is known as the **ASEAN Declaration**.
 - Over the next few decades, five other countries joined them – **Brunei Darussalam, Lao PDR, Cambodia, Myanmar and Vietnam**.
- **ASEAN Declaration:**
 - The ASEAN Declaration conveyed the aspiration to **further regional cooperation**.
 - These were about **cooperation** in the economic, social, cultural, technical, educational and other fields, and in the **promotion of regional peace and stability** and adherence to the principles of the United Nations Charter.
 - It stipulated that the Association would be **open for participation by all States in the Southeast Asian** region subscribing to its aims, principles and purposes.

6. (a)

India and Saudi Arabia aim to set up a joint task force to explore early implementation of the '**west coast refinery project**' for which the Arabian nation will invest \$50 billion.

- At the **first India-Saudi Arabia Strategic Partnership Council** meeting, both countries agreed to diversify their hydrocarbons relationship into a comprehensive energy partnership.

7. (b)

East Asia Summit (EAS)

- **Origin:** The origins of EAS dates back to the 1990 proposal for an **East Asian Economic Grouping (EAEG)**.
 - The project was later revived through the **ASEAN Plus Three or APT** (China, Japan, and South Korea) Summit of Heads of State and Government that first met in Kuala Lumpur in December 1997. **Hence option 1 is incorrect.**
 - It eventually found expression through the **creation of the EAS in 2005**.
- **Membership:** Since its establishment, the membership of the EAS has increased from the original 16 to 18 countries comprising the **ten ASEAN countries**, along with **Australia, China, India, Japan, New Zealand, the Republic of Korea, the United States, and Russia**. **Hence option 2 is correct.**
- **The Group of Seven (G7):**
 - It is an informal grouping of seven of the world's advanced economies, including Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States, as well as the European Union.
- **OIC:**
 - It counts 57 members, all of which are Islamic countries or Muslim majority members.
 - The Central African Republic, Russia, Thailand, Bosnia & Herzegovina, and the unrecognised Turkish Cypriot "state", have Observer status.
- **Option 3 and 4 are incorrect.** India is neither a part of G7 nor OIC.

8. (b)

The Five Eyes is an intelligence sharing network made up of the USA, the United Kingdom (UK), Canada, Australia and New Zealand.

- Its roots date back to an alliance originally created in 1946 between the United States and the United Kingdom as a way to share intelligence signals.
- It was expanded in 1948 to include Canada and in 1956 to include Australia and New Zealand.

9. (a)

About 'Five Eyes'

- The 'Five Eyes' is a **multilateral intelligence-sharing network** of five countries, **Australia, Canada, New Zealand, the U.K. and the U.S.**
 - It is both surveillance-based and tracks signals intelligence (SIGINT).

Intelligence documents shared between the member countries are classified as 'Secret—AUS/CAN/NZ/UK/US Eyes Only,' which gave the group its title '**Five Eyes.**' The Five Eyes have become involved in ocean and maritime surveillance, scientific and defence intelligence analysis, medical intelligence, geospatial intelligence, counterintelligence, counterterrorism, and the continuous sharing of intelligence products via a secret collective database known as '**Stone Ghost**'.

ECONOMY

1. Consider the following statements:

1. The Indian Technical Textiles market is the 5th largest in the world .
2. The Technical Textile segment accounts for around 15% of the overall textile and Apparel market in India.
3. National Technical Textiles Mission (NTTM) was launched to achieve a market size of 80 billion dollars by 2024-25.

Which of the statements given above is/are correct?

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

2. With reference to the Indian economy, consider the following statements:

1. Total tax revenue which is used for GDP compilation, excludes the Non-GST Revenue.
2. Quarterly Estimates of GDP are released by the Department of Economic Affairs, Ministry of Finance.

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 Bharat NCAP (New Car Assessment Program), consider the following statements:

1. It will allocate Star Ratings ranging from 0 to 4.
2. It is only applicable to cars that are produced in the country and not the imported models.

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. "Central Banker Report Cards 2023", is released by which of the following institutions?

- | | |
|---------------------------|--------------------------|
| (a) European Central Bank | (b) World Economic Forum |
| (c) World Bank | (d) Global Finance |

5. Consider the following statements:

1. Fixed interest rates are those that do not change during the tenure of the loan.
2. Floating interest rates are generally higher than fixed interest rates.

Which of the statements given above is/are correct?

- | | |
|------------------|---------------------|
| (a) 1 only | (b) 2 only |
| (c) Both 1 and 2 | (d) Neither 1 and 2 |

6. With reference to Hallmarking, consider the following statements:
1. Hallmarks are official marks used in many countries as a guarantee of purity or fineness of precious metal articles.
 2. In India, at present only gold has been brought under the purview of Hallmarking.
 3. Bureau of Indian Standards (BIS) implements the Mandatory Hallmarking in districts of the country.
- How many statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
7. Gresham's Law recently seen in the news, related to which of the following?
- (a) Exchange rate between two currencies.
(b) Modern understanding of gravity.
(c) Theory of Evolution by natural selection.
(d) The relation between velocity, density, and pressure.
8. Consider the following statements:
1. The diesel engines have lower fuel economy in comparison to petrol engines.
 2. Petrol has greater energy content per litre in comparison to diesel.
- 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. With reference to the 'Rubber Board', consider the following statements:
1. It is a statutory body.
 2. It functions under the Ministry of Agriculture, Government of India.
 3. Its headquarters is located at Chennai in Tamil Nadu.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
10. With reference to the Railway Board of India, consider the following statements:
1. It is a statutory body under the Ministry of Railways, Government of India.
 2. It was established to control the administration of railways 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
11. With reference to the 'Bharat Drone Shakti 2023', consider the following statements:
1. It is the first-ever drone exhibition in India organised by the Ministry of Defence with the help of Defence Research and Development Organisation (DRDO).
 2. It is focused on in-house innovations projects.
 3. It seeks to develop a major drone hub in India by 2030.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

12. Consider the following statements, with reference to The National Pension System (NPS):
1. It is mandatorily applicable on Central Government employees including Armed Forces recruited after 2004.
 2. NPS can be subscribed by any Indian citizen aged between 18-70 years on a voluntary basis.
 3. Hindu Undivided Families (HUFs) and Persons of Indian Origin (PIOs) are eligible for subscribing to NPS.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 3 only
13. Which of the following are covered by the PM Gati Shakti National Master Plan?
1. Bharatmala
 2. Sagarmala
 3. UDAN
 4. Pharmaceutical clusters
 5. Defence corridors
- Select the correct answer using the code given below.
- (a) 1, 2 and 4 only (b) 3, 4 and 5 only
(c) 1, 2, 3 and 5 only (d) 1, 2, 3, 4 and 5
14. With reference to the Global Innovation Index, which of the following statements is/are correct?
1. It is published by the World Economic Forum.
 2. India has been on a declining trajectory, over the past several years in the Global Innovation Index (GII).
- 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 Indian Renewable Energy Development Agency Limited (IREDA), consider the following statements:
1. It was established as a Non-Banking Financial Company (NBFC) with the Reserve Bank of India.
 2. Financial and administrative control come under the Ministry of Finance.
- 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)

In News : The Ministry of Textiles has approved the Startup Guidelines for Technical Textiles - **Grant for Research and Entrepreneurship across Aspiring Innovators in Technical Textiles (GREAT)** providing grant-in-aid upto INR 50 Lakhs for upto a period of 18 months.

Statements 1 and 2 are correct : Technical Textiles termed as a “Sunrise” sector is finding widespread applications in diverse industries such as agriculture, medical, infrastructure development, automotive, aerospace, sports, protective clothing, packaging etc.

- Indian Technical Textiles market is the **5th largest in the world** and is rapidly growing, both in terms of value and output.
- The Technical Textile segment accounts for around **15% of the overall textile and Apparel market in India** and is significant in terms of employment and investment

Statement 3 is not correct : NTTM was launched to achieve a market size of **\$40 billion and export of \$10 billion** in the technical textiles segment by 2024-25.

2. (d)

Both the Statements 1 and 2 are not correct:

- For **GDP compilation, total tax revenue is used**, that includes **Non-GST** Revenue as well as GST Revenue.
- **Quarterly Estimates of GDP** are released by the **National Statistical Office (NSO)**, Ministry of Statistics and Programme Implementation (MoSPI).

3. (d)

Both the statements are not correct.

About Bharat NCAP(New Car Assessment Program):

- It is a new car safety assessment programme which proposes a mechanism of awarding ‘**Star Ratings**’ to automobiles based upon their performance in crash tests.

Features:

- The proposed Bharat NCAP evaluation will allocate Star Ratings ranging from 1 to 5.
- Vehicles for this program will be tested at facilities equipped with the necessary infrastructure, such as testing agencies.
- It will be **applicable to locally produced and imported motor vehicles** of category M1 with a gross vehicle weight less than **3.5 tonnes**.
- In addition to the driver’s seat, M1 category motor vehicles are utilized for carriage of passengers, **comprising 8 seats in addition to the driver’s seat**.

4. (d)

The Central Banker Report Cards, published annually by Global Finance since 1994, grade the central bank governors of 101 key countries.

- **It celebrates those bank governors** whose strategies outperformed their peers through originality, creativity and tenacity.
- The Bank Governors who earned an ‘A+’ grade in the Global Finance Central Banker Report Cards 2023 are **Shaktikanta Das from India, Thomas J. Jordan (Switzerland) and Nguyen Thi Hong (Vietnam)**.

5. (a)

Difference between a fixed and floating interest rate:

- **Fixed** interest rates are those that **do not change during the tenure of the loan**. On the other hand, **floating** interest rates are **subject to market dynamics and the base rate** — therefore, the risk differentiation. **Hence, Statement 1 is correct.**
- **Floating interest rates are generally lower than fixed interest rates.** For example, if the floating interest rate for home loans is 10.5%, the fixed interest rate would be 12%.

Hence, **Statement 2 is not correct.**

- It has been widely argued that **preference for the floating rate-based regime** is to better adjust their positions as per the evolving market dynamics.
- Also noteworthy is the fact that **floating interest rate loans do not draw any prepayment penalty**— unlike fixed rate loans.
- However, **the fixed rate-based regime endows a borrower with greater certainty and security.** This also helps in **better planning and structuring of individual budgets.**

6. (b)

Statement 1 is correct: Hallmarking is the **accurate determination** and official recording of the proportionate content of precious metal in precious metal articles.

- Hallmarks are thus **official marks used in many countries as a guarantee of purity or fineness** of precious metal articles.
- This certificate is issued to all registered jewellers **based on purity tests at certificated centres.**
- The principle objectives of the Hallmarking Scheme are to **protect the public against adulteration** and to obligate manufacturers to maintain legal standards of fineness.

Statement 2 is not correct: In India, at present two precious metals namely **gold and silver** have been brought under the purview of Hallmarking.

Statement 3 is correct: Implementation: Bureau of Indian Standards (BIS) has been successful in implementation of Mandatory Hallmarking in districts of the country.

- It is the **National Standard Body** of India established under the **BIS Act 2016.**

7. (a)

Gresham's law came into play most recently during the **economic crisis in Sri Lanka**, during which the Sri Lankan central bank fixed the **exchange rate between the Sri Lankan rupee and the U.S. dollar.**

Gresham's law

- Gresham's law is named after **English financier Thomas Gresham** who advised the **English monarchy on financial matters.**
- Gresham's law refers to the dictum that **"bad money drives out good."**
 - It comes into play when the **exchange rate between two moneys or currencies** is fixed by the government at a certain ratio that is **different** from the **market exchange rate.**
- It applies not just to **paper currencies** but also to **commodity currencies and other goods.**

8. (d)

Statement 1 is not correct:

- Diesel fuel is made from crude petroleum, consisting of small amounts of sulphur, nitrogen, and oxygen.
- The diesel distillate is heavier than gasoline, kerosene and jet fuel and derived by distillation process of crude oil.
- **Advantages of diesel:** The **higher fuel economy** of diesel engines compared to petrol engines.

Statement 2 is not correct:

- Diesel has **greater energy content per litre**, as they have higher compression ratios and diesel engines are inherently efficient. This makes diesel the fuel of **choice for heavy vehicles.**

9. (a)

Statement 1 is correct:

- The 'Rubber Board' is a **statutory body** constituted under the **Rubber Act 1947**, for the overall development of the rubber industry in the country.
 - On the recommendation of the ad-hoc committee, the government passed the Rubber (Production and Marketing) Act, 1947, on 18th April 1947, and the "Indian Rubber Board" was constituted forthwith. The Rubber Production and Marketing (Amendment) Act, 1954, amended the name of the Board as "The Rubber Board".

Statement 2 is not correct: It functions under the **Ministry of Commerce & Industry** of the Government of India.

Statement 3 is not correct: The **Board's headquarters** is located at **Kottayam in Kerala**.

10. (c)

Both the statements are correct:

- The Railway Board was **established in 1905 under the Indian Railway Board Act, 1905 for controlling the administration of railways** in India with certain powers of functioning under the Indian Railways Act, 1890, which was later revised as the Railways Act, 1989.
- Thus, **it is a statutory body**, which was established through an Act of Parliament.
- The Union Government may, by notification in the official Gazette, invest the Railway Board, either absolutely or subject to conditions, like
- with all or any of the powers or functions of the Central Government under the Indian Railways Act, 1890 (later revised as the Railways Act, 1989), with respect to all or any Railways, and with the power of the officer referred to in Section 47 of the Act to make general rules for Railways administration.

11. (b)

Statement 1 is not correct:

- The Union Defence Minister inaugurated the **first-ever drone exhibition 'Bharat Drone Shakti 2023'** at the Hindan Air Force Station, Ghaziabad.
- The event is jointly **organised by the Indian Air Force (IAF) and the Drone Federation of India (DFI)** featuring over 75 drone start-ups from across the country.

Statement 2 is correct:

- It is focused on the latest **in-house innovations projects** such as a hybrid drone detection system, an Artificial Intelligence (AI) engine for fault diagnosis, a fly-by-wire tester, stabilised power supply trolleys, and a QR code-based tool crib management system.

Statement 3 is correct:

- The IAF and DFI seek to develop a **major drone hub by 2030** and bolster the **Make in India**, by showcasing their capabilities through a series of **aerial & statics demonstrations**.

12. (b)

In News : PFRDA is in the process of appointing **DSP Pension Fund Managers** as the 11th fund manager permitted to manage retirement savings under the **National Pension System (NPS)**.

- **Statement 1 is not correct :** **NPS** has been implemented for all Government Employees (**except armed forces**) joining Central Govt. on or after **1st January 2004**. Most of the State/UT Governments have also notified the National Pension System (NPS) for their new employees.
- NPS has been made available to every Indian Citizen from 1st May 2009 on a **voluntary basis**.

- It is being administered and regulated by Pension Fund Regulatory and Development Authority (PFRDA) set up under PFRDA Act, 2013.

Statement 2 is correct : NPS can be subscribed by any **Indian citizen (resident/non-resident/overseas) aged between 18-70 years on a voluntary basis.**

Statement 3 is not correct : An NRI can open an NPS account. Contributions made by NRI are subject to regulatory requirements as prescribed by RBI and FEMA from time to time. Hindu Undivided Families (**HUFs**) and Persons of Indian Origin (**PIOs**) are **not eligible for subscribing to NPS.**

13. (d)

In News: The 56th Network Planning Group Meeting under PM Gati Shakti assessed six Infrastructure Projects. PM GatiShakti - National Master Plan for Multi-modal Connectivity was launched in October 2021.

- PM Gati Shakti will cover infrastructure schemes of various Ministries and State Governments like **Bharatmala, Sagarmala, Dry/Land Ports, Inland Waterways, UDAN** etc. Economic sectors such as textile clusters, **pharmaceutical clusters**, fishing clusters, **defence corridors**, industrial corridors, electronic parks, agriculture sectors will be covered to improve connectivity and make Indian businesses more competitive. It will leverage technology widely including spatial planning tools with ISRO (Indian Space Research Organisation) imagery developed by BiSAG-N (Bhaskaracharya National Institute for Space Applications and Geoinformatics).

14. (d)

Both Statements are not correct: **Global Innovation Index** is published by the **World Intellectual Property Organization**.

- India retains **40th rank out of 132** economies in the **Global Innovation Index 2023** rankings. India has been on a **rising trajectory**, over the past several years in the Global Innovation Index (GII), from a rank of **81 in 2015 to 40 in 2023.**

15. (a)

Statement 1 is correct:

- **Indian Renewable Energy Development Agency Limited (IREDA)** has been notified as a 'Public Financial Institution' under **section 4 'A' of the Companies Act, 1956** and registered as **Non-Banking Financial Company (NBFC)** with Reserve Bank of India (RBI).

Statement 2 is not correct:

- **IREDA** is a **Public Limited Government** Company established as a **Non-Banking Financial Institution in 1987**, under the administrative control of the **Ministry of New and Renewable Energy (MNRE).**
- It engaged in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation.

AGRICULTURE

1. Minor Irrigation Census is released by which of the following bodies?
 - (a) Ministry of Agriculture and Farmers welfare
 - (b) Ministry of Jal Shakti
 - (c) Ministry of Chemicals and Fertilisers
 - (d) Ministry of Finance
2. Which of the following animals is/ are classified as a “Food Animal” by the Food Safety and Standards Authority of India?
 1. Mithun
 2. Nilgai
 3. Wild boar
 4. Himalayan yakSelect the correct answer using the code given below
 - (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 4 only
 - (d) 1 and 4 only
3. Schizostachyum andamanicum, a species having economic potential for making reusable straws, is related to which of the following plants?
 - (a) Banana
 - (b) Bamboo
 - (c) Palm Tree
 - (d) Neem Tree
4. The terms PBKnot and SPLAT are sometimes seen in the news. Which of the following correctly describes these terms?
 - (a) They are payloads onboard Chandrayaan-3.
 - (b) They are new Genetically Engineered Varieties of Cotton.
 - (c) They are mating disruption products approved by the Central Insecticide Board and registration committee.
 - (d) None
5. The term ‘PRIMA ET11’ sometimes mentioned in the news, in the context of:
 - (a) Space Technology
 - (b) Infrastructure through 3-D Printing
 - (c) Eco-Tourism
 - (d) Agriculture Mechanisation
6. “YES-Tech” recently seen in the news, is related to which of the following?
 - (a) Estimation of carbon footprint of industries
 - (b) A new technology to detect the presence of black holes
 - (c) A new automated real-time yield estimation system
 - (d) A tech to diagnose AIDS at initial stage
7. Consider the following statements:
 1. India is the 2nd largest milk producer in the world after China.
 2. M. S. Swaminathan is known as the “Father of the White Revolution” 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

8. With reference to Norman E. Borlaug Award, consider the following statements:

1. Swati Nayak became only the third Indian agriculture scientist to win the award in 2023.
2. It is awarded by the Food and Agriculture Organization of the United Nations.
3. It is named after the Nobel laureate scientist Norman E. Borlaug.

How many statements given above are correct?

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

EXPLANATIONS

1. (b)

The **Ministry of Jal Shakti** released the **report on the 6th census on minor irrigation schemes**.

- So far, **five censuses** have been conducted with reference year **1986-87, 1993-94, 2000-01, 2006-07 and 2013-14** respectively.
- The 6th minor irrigation census **with reference year 2017-18** was completed in 32 States/ UTs.
- The census was conducted under the **centrally sponsored scheme "Irrigation Census"**.

2. (d)

The Food Safety and Standards Authority of India (FSSAI) has recently recognised mithun, a semi-domesticated bovine animal, as a food animal. This paves the way for the promotion of its consumption and commercial rearing in the Northeast. Earlier, the Himalayan yak has been accepted as a food animal by the scientific panel of Food Safety and Standard Authority of India (FSSAI) considering decline in their population.

About Mithun

- Mithun is a **semi-domesticated bovine species that is ubiquitous in a few Northeastern states** and plays an important role in socioeconomic and cultural fabric of the tribal population.
- It is **the state animal of Arunachal Pradesh and Nagaland** and is primarily reared for meat in community farms.
- Arunachal Pradesh, Nagaland, Manipur and Mizoram account for almost 98 per cent of the global mithun production.

3. (b)

The reusable straw is developed from a species of endemic **bamboo plant (Schizostachyum andamanicum)** which is found in the **Andamans and Nicobar Islands**.

- The Schizostachyum andamanicum was discovered on the island about three decades ago and now its economic potential has received a boost with the granting of the patent for reusable straw and its manufacture.
- This species of bamboo is characterized by **a thin large hollow erect culm (stem) with long internodes** and has potential for developing into a straw.

4. (c)

PBKnot is an innovative mating disruption technology, approved by the **Central Insecticides Board and Registration Committee (CIBRC)** of the Ministry of Agriculture & Farmers Welfares, Government of India is an ideal approach for effective Pink bollworm management.

- **Specific Pheromone and Lure Application Technology for Pink Bollworm (SPLAT-PBW)** is an eco-friendly, cost-effective mating disruption tool for the management of the pink bollworm on cotton.

5. (d)

PRIMA ET11 is a **Compact Electric Tractor** developed by CSIR – Central Mechanical Engineering Research Institute (CMERI).

Salient features of the CSIR PRIMA ET11:

- It has been designed and manufactured with **indigenous components and technologies**, and has been designed in a way that its dynamics, weight distribution, transmission engagements, then lever and pedal position everything has been well considered.
 - **Coming to transmission**, the tractor is being designed with a robust and efficient transmission system by using the semi Synchronized type gearing system.
- **More than 4 hours of usage in 7 to 8 hours of charging** using conventional home charging sockets.
- The tractor is equipped with a **lifting capacity of 500 kg** or more and can tow a **1.8-ton capacity trolley** with a **max speed of 25 kmph**.
- It is powered through the state of the art **Lithium ion battery with Prismatic cell confirmation**, having a life of more than 3000 cycles.
- **V2L (Vehicle to Load)** feature is added so that **battery power can be utilised for other secondary applications** like pump and irrigation etc when the tractor is not in operation.
- It is Women friendly.
 - For this we have given special attention in the ergonomics, for eg: all the levers, switches etc have been placed for easy approach to the women.

6. (c)

A new automated real-time Yield Estimation System called YES-Tech was put in place from this kharif season for the wheat and rice crop.

- The system, created with assistance from ISRO and ICAR, will be ramped up to cover other crops, particularly pulses and oilseeds.

7. (d)

Statement 1 is not correct: Milk production in the country was stagnant during the **1950s and 1960s**.

- India was a **milk-deficit nation dependent on imports**, and the annual production growth was negative for several years.
- The evolution of the dairy sector in India and the stellar role played by dairy cooperatives since the launch of **Operation Flood** form an integral part of the country's remarkable growth story after Independence.
- India is ranked **1st in milk production contributing around 23 percent of global milk production**. Milk production has increased by 51.05% over the past 8 years .

Statement 2 is not correct : In India, the birthday of Dr. Verghese Kurien, on November 26, is observed as National Milk Day.

- The Department of Animal Husbandry and Dairying celebrates "National Milk Day" to commemorate the birth anniversary of the "**Father of the White Revolution in India**", Dr. **Verghese Kurien also known as the Milkman of India**.

8. (b)

Statement 1 is correct: Swati Nayak became only the **third Indian agriculture scientist** to win the prestigious **Norman E. Borlaug Award for 2023**.

- Ms. Nayak and her team formulated a strategy for introducing the drought-tolerant **Sahbhagi Dhan rice variety in Odisha**.

Statement 2 is not correct: The Dr. Norman E. Borlaug Award

- It is the award for Field Research and Application, endowed by the **Rockefeller Foundation**, is presented every October in Des Moines, Iowa, by the **World Food Prize Foundation**.
- This \$10,000 award recognizes exceptional, science-based achievement in **international agriculture and food production** by an individual **under the age of 40**.

Statement 3 is correct: Who is Dr. Norman E. Borlaug?

- He is a scientist with outstanding contributions **integrating the various streams of agricultural research into viable technologies**.
- He was awarded the **Nobel Peace Prize in 1970** for having given a well-founded hope - **the green revolution**.

DEFENCE/INTERNAL SECURITY

1. With reference to the Special Protection Group (SPG), consider the following statements:
1. It was established by an Executive Order of the President of India as an armed force of the Union Government.
 2. It provides proximate security to the immediate family of the former Prime Ministers of India.

Which of the statements given above is/are correct?

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

2. Phase II of the 21st edition of Varuna (Varuna-23) bilateral exercise was conducted between India and which of the following countries?

- | | |
|---------------|------------|
| (a) Australia | (b) Japan |
| (c) France | (d) Israel |

3. With reference to the Border Road Organisation (BRO), which of the following statements is/are correct?

1. BRO was formed after the Sino-Indian War in 1965 for speedy development of road networks in border regions.
2. It works under the administrative control of the Ministry of Home Affairs.

Select the correct answer using the code given below:

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

4. 'Dornier-228', 'B-350' and 'B-360', recently seen in the news, are related to which of the following?

- (a) Dwarf planets
- (b) Aircrafts equipped with Flight Inspection systems
- (c) Nuclear Submarines
- (d) Anti-tank guided missiles

5. Consider the following statements:

1. INS Vikrant is the largest ship built in maritime history of India.
2. The first major operation of INS Vikramaditya was 'Operation Jupiter' in 1989 as part of Peacekeeping Operations in Sri Lanka.

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:**The Special Protection Group (SPG):**

- It was established through an **act of Parliament** i.e. '**Special Protection Group Act, 1988**', not by an Executive Order of the Union Government.

Statement 2 is correct:

- The SPG Act provides for the **constitution and regulation of an armed force of the Union** called the Special Protection Group for **providing 'proximate security'** to:
 - the **Prime Minister** and the members of **his immediate family**; and
 - **any former Prime Minister** or to the **members of his immediate family**.
 - However, any former Prime Minister or any member of the immediate family of the Prime Minister or of a former Prime Minister **may decline proximate security**.

2. (c)

Indian & French Navy bilateral naval exercise was initiated in 1993.

- The exercise was later christened as 'Varuna' in 2001 and has since become a hallmark of robust India-France strategic bilateral relationship.
- It provides an opportunity to learn from each other's best practices and procedures.

3. (d)

Both the Statements are not correct.**Border Roads Organisation (BRO)**

- It was formed in **1960 by Pandit Jawaharlal Nehru** for coordinating the speedy development of an adequate road communication network of roads in the **North and the North-Eastern border** regions of the country.
- It works under the administrative control of the **Ministry of Defence**.
- **Major Functions**
 - Support the armed forces meet their strategic needs by committed, dedicated and cost-effective development and sustenance of the infrastructure.
 - Achieve international levels of quality excellence and time consciousness in a diversified sphere of construction activity in a cost-effective manner.
 - Optimize potential and expertise through increased involvement in agency, transnational and national development projects.

4. (b)

'Dornier-228', 'B-350' and 'B-360' are the **aircrafts equipped with Flight Inspection systems**.

- Presently, The FIU (Flight Inspection Unit) of AAI operates **One Dornier-228 and One B-350 aircraft** for Flight Calibration /Inspection purposes and recently added **two new B-360 types of aircraft** equipped with advanced state-of -the -art Flight Inspection systems into the Fleet.

5. (a)

In News: The Defence Procurement Board (DPB) discussed the Navy's proposal for acquiring a second **Vikrant-like aircraft carrier**.

Statement 1 is correct : INS Vikrant is designed by the Indian Navy's in-house Warship Design Bureau (WDB) and built by Cochin Shipyard Limited, a Public Sector Shipyard under the Ministry of Ports, Shipping & Waterways.

- It has been built with state of the art automation features and is the **largest ship ever built in maritime history of India**.
 - It was launched into water in 2013 and commissioned in 2022.
 - The Indigenous Aircraft Carrier is named after her illustrious predecessor, **India's first Aircraft Carrier** which had played a vital role in the 1971 war.

Statement 2 is not correct: INS Viraat was originally commissioned by the British Royal Navy as HMS Hermes on November 18, 1959.

- INS Viraat was finally commissioned by the Indian Navy on 12 May 1987.
- **INS Viraat's first major operation was 'Operation Jupiter'** in July 1989 as part of Peacekeeping Operations in Sri Lanka, following the breakdown of the Indo- Sri Lankan Accord of 1986.

SCIENCE AND TECHNOLOGY

1. The One Future Alliance (OFA) often seen in news, is related to which of the following?
 - (a) Digital Public infrastructure
 - (b) Food Security infrastructure
 - (c) Health care and education infrastructure
 - (d) Telecommunication and transportation infrastructure
2. Consider the following statements:
 1. Horizon Europe is the world's biggest civil research and innovation programme
 2. Copernicus is the Earth observation component of NASA's space programme .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. The term K2-18 b recently seen in the news, is related to which of the following ?
 - (a) New Covid variant
 - (b) Exoplanet
 - (c) Mountain in Asia
 - (d) Ballistic missile
4. The word Therapsaurus indicus is sometimes mentioned in news with reference to which of the following?
 - (a) Fossils of a kind of dinosaur
 - (b) An early human species
 - (c) Species of a Frog
 - (d) Fossils of a kind of early species of Elephant
5. With respect to the asteroids, consider the following statements:
 1. The main asteroid belt lies in between Saturn and Jupiter.
 2. The USA is the only country to bring back asteroid samples on earth.
 3. Asteroid Bennu is expected to come dangerously close to Earth in future.How many of the statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
6. Consider the following statements, with reference to the Mars:
 1. It has a thin atmosphere composed mainly of carbon dioxide.
 2. It has two moons, Titan and Enceladus.
 3. It is also known as the Red Planet.How many statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None

7. The 'Church-Turing thesis' sometimes appeared in the news, in context of:
- (a) Western Secularism (b) Quantum Computing
(c) Net Zero Goal of Climate Change (d) Shipping Industries
8. Which one of the following is the main objective of 'internet cookies'?
- (a) To send data from the user's device to the web server.
(b) To store data on the user's device that can be accessed by the web server.
(c) To encrypt data between the user's device and the web server.
(d) To delete data from the users device or the web server

EXPLANATIONS

1. (a)

'One Future Alliance' (OFA)

- It is a voluntary initiative proposed by the G20 India Presidency with support from **UNDP** and its knowledge partners.
- It aims to bring together governments, the private sector, academic and research institutions, donor agencies, civil society organizations and other relevant stakeholders and existing mechanisms to synergize global efforts in the **Digital Public infrastructure (DPI) ecosystem**.

Digital Public Infrastructure

- DPI refers to platforms such as identification (ID), payment and data exchange systems that help countries deliver vital services to their people.
- DPI is a combination of
 - Networked open technology standards built for public interest,
 - Enabling governance, and
 - A community of innovative and competitive market players working to drive innovation, especially across public programmes.

2. (a)

In News : The UK has rejoined the flagship Horizon Europe research programme

- Along with Horizon Europe, the UK has joined Copernicus.

Statement 1 is correct : Horizon Europe is the **world's biggest civil research and innovation programme**

- It is open to EU member states and countries that associate to the programme, as the UK has now done after leaving it due to Brexit.
- The funding supports international collaborations focused on a wide range of issues, from cancer and infectious diseases to the climate crisis, food security, artificial intelligence and robotics.

Statement 2 is not correct : Copernicus is the Earth observation component of the **European Union's Space programme**, looking at our planet and its environment to benefit all European citizens.

- It offers information services that draw from satellite Earth Observation and in-situ (non-space) data

3. (b)

NASA's James Webb Space Telescope in its study of **K2-18 b** discovered the presence of carbon dioxide and methane.

- K2-18 b is a super Earth **exoplanet** that orbits an **M-type star**.
 - It lies **120 light years** from earth and orbits the cool dwarf star **K2-18 a**.
 - It is **8.6 times** as massive as Earth and the size lies that of between earth and Neptune.

4. (a)

The Oldest fossils of a plant-eating dinosaur have been found in the Thar desert near the Jaisalmer Basin, Rajasthan by the Geological Survey of India.

Tharosaurus indicus

- The scientists discovered the remains of a **Sauropod dinosaur**, which is the same clade as the **long-necked herbivores in Jurassic Park** – these happened to be the oldest known fossils of this particular kind of sauropod.
- The fossils belong to the family **Dicraeosauridae** and from the superfamily **Diplodocoidea**.
- These are the first Dicraeosaurid sauropods to have been found in India.
- The scientists named the dinosaur Tharosaurus indicus, with Tharo deriving from the **Thar desert**; saurus from the Greek 'sauros', or lizard; and indicus from its Indian origin.
- At **167 million years old**, they are the oldest known Diplodocoid fossils in the world.
- However, members of the Dicraeosauridae family of sauropods – to which Tharasaurus belongs – were not nearly as large. This family was unique: its **members were smaller and had shorter necks and tails** compared to the other long-necked sauropods.

5. (a)

Statement 1 is not correct: Asteroids, sometimes called **minor planets**, are rocky, airless remnants left over from the early formation of our solar system about 4.6 billion years ago.

- It likely formed in the **Main Asteroid Belt between Mars and Jupiter**. The belt is estimated to contain between 1.1 and 1.9 million asteroids larger than 1 kilometre in diameter, and millions of smaller ones.

Statement 2 is not correct: Japan, and the USA are the only countries to bring back asteroid samples.

- A sample from the **Asteroid Ryugu**, having a rich complement of organic molecules, delivered by Japan's Hayabusa2 spacecraft.
- The **Origins, Spectral Interpretation, Resource Identification, and Security-Regolith Explorer (OSIRIS-REx) spacecraft** of NASA released the sample from the **Bennu asteroid** in the Utah desert of the USA.

Statement 3 is correct: Asteroid **Bennu** is a small, **near-Earth asteroid** that **passes close to Earth** about **every six years**.

- Bennu is expected to come **dangerously close to Earth in 2182**.
- The data collected by Osiris-Rex will help with **asteroid-deflection efforts**.

6. (b)

Statement 1 is correct: Mars has a **thin atmosphere composed mainly of carbon dioxide**.

Statement 2 is not correct: Mars has two moons, **Phobos and Deimos**. Saturn has **146 moons** in its orbit. The giant moon is Titan and the small moon is Enceladus.

Statement 3 is correct: Mars is known as the **Red Planet** because **iron minerals in the Martian soil oxidize**, or rust, causing the **soil and atmosphere to look red**.

7. (b)

Quantum Computing:

- It promises more speed and more efficient problem-solving abilities, challenging the boundaries set by classical, conventional computing.
- A quantum computer has the ability to solve some problems much faster than a classical computer that establishes quantum computers as superior machines, i.e. Quantum supremacy.
- A researcher has shown the '**Quantum Complexity Theory**' that one class of mathematical problems can be solved only by quantum computers, not classical computers.

Quantum Complexity Theory:

- There are **computational barriers** to classical computers in comparison to quantum computers.
- It challenges the **extended Church-Turing thesis**, which is the idea that classical computers can efficiently simulate any physical process.

8. (b)

A cookie is a small piece of data that is **created by a web server and placed on the user's device by the web browser**.

- These are text files with small pieces of data — like a username and password — that are used to identify your computer with a network.
- Specific cookies are used to identify specific users and improve their web browsing experience.

The Hypertext Transfer Protocol (HTTP) cookies are built specifically for web browsers to track, personalise and save information about each user's session (amount of time spent on a site) which is created to identify you when you visit a new website.

HEALTH

1. With reference to the Stem Cells, consider the following statements:
 1. It is a cell with the potential to form many of the different cell types found in the body.
 2. Adult Somatic Cells (ASCs) have more potential than the embryonic stem cells.
 3. Hematopoietic stem cell transplantation has been used to treat people with conditions such as leukaemia.How many of the statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
2. With reference to the World Health Organisation (WHO), which of the following statements is/are correct?
 1. It was founded just before the end of World War-II.
 2. The MPOWER measures are the initiative of WHO in tackling antibiotic resistance.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. Recently, the Drugs Controller General of India (DCGI) issued an advisory for patients and healthcare professionals to discontinue the use of popular Digene gel due to safety concerns. Digene gel is related to which of the following?
 - (a) Athlete's foot
 - (b) Tuberculosis (TB)
 - (c) Coronavirus disease
 - (d) Gastritis
4. With reference to 'Milk Alkali Syndrome', consider the following statements:
 1. It is caused by excessive consumption of Milk.
 2. It leads to higher levels of calcium in the body.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. In context of Human Embryo Development, the term 'Primitive Streak' refers to:
 - (a) Attachment of Embryo to the Uterus
 - (b) Fertilization of Egg with sperm
 - (c) Development of Bilateral Symmetry
 - (d) None of the above
6. For which of the following diseases mosquitoes serve as vectors?
 1. Malaria
 2. Dengue
 3. Zika
 4. Lymphatic filariasis

5. Yellow fever
6. AIDS
7. Hepatitis C

Select the correct answer using the code given below:

- | | |
|-------------------------|-------------------------|
| (a) 1, 2, 3, 4 and 5 | (b) 1, 2, 3, 5, 6 and 7 |
| (c) 2, 3, 4, 5, 6 and 7 | (d) 1, 2, 3, 4, 5 and 7 |

7. With reference to the Scrub typhus, which of the following statements is/are correct?

1. Scrub typhus is a disease caused by a bacteria called *Orientia tsutsugamushi*.
2. The disease spread to people through the bites of infected larval mites.

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 |

8. Which of the following statements is **not** correct regarding the Nipah virus?

- (a) The animal host reservoir of the virus is the fruit bat, commonly known as flying fox.
- (b) Its symptoms include headache, diarrhoea, muscle pain, etc.
- (c) The Nipah virus has high infectivity with lowest fatality.
- (d) There are currently no drugs or vaccines specific for Nipah virus infection.

9. With reference to the TrueNat test, consider the following statements:

1. It is a cost-effective and a miniature version of the Polymerase Chain Reaction (PCR) test.
2. It was originally developed to detect Tuberculosis (TB) in one hour.

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 Polycystic ovary syndrome (PCOS), consider the following statements:

1. It is a multifactorial endocrine disorder which is characterized by chronic anovulation.
2. It usually starts after a woman attains 40 years of age.
3. It can be cured by early diagnosis and medication.

How many statements given above are correct?

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

EXPLANATIONS

1. (b)

Statement 1 is correct: What are Stem Cells?

- A stem cell is a cell with the **potential** to form **many of the different cell types** found in the body.
- When stem cells **divide**, they can form **more stem cells** or other cells that perform **specialized functions**.

Statement 2 is not correct: Somatic Stem Cells: These are the **Adult Somatic Cells (ASCs)**. They are in **bone marrow** that makes the blood.

- These are found in the **liver** that give rise to hepatocytes and secretory cells.
- There are stem cells in **neural tissue** that give rise to neurons and astroglial cells.
- And **muscle has stem cells**.
- **Embryonic Stem Cells:** These are derived in about **six- to eight-day embryos**, and these are cells with even **more potential than the adult cells**, because an embryonic stem cell derived in the proper way can give rise to neural cells, muscle cells, and liver cells.

Statement 3 is correct: Stem cell therapy utilizes the unique properties of stem cells, including **self-renewal and differentiation**, to **regenerate damaged cells and tissues** in the human body or **replace** these cells with new, healthy and fully functional cells.

- For over 90 years now, **hematopoietic stem cell transplantation** has been used to treat people with conditions such as **leukaemia and lymphoma**.
- After chemotherapy or radiation therapy wrecks the patient's healthy cells (along with the cancerous ones), a donor's **healthy bone marrow reintroduces functional stem cells** to replicate inside of a patient and to produce additional normal blood cells.

2. (d)

Statement 1 is not correct: WHO is the **United Nations agency** that connects nations, partners and people to promote health, keep the world safe and serve the vulnerable – so everyone, everywhere can attain the highest level of health.

- It was **founded in 1948**.
- **Headquarters: Geneva Switzerland**.

Statement 2 is not correct: The **WHO Framework Convention on Tobacco Control (WHO FCTC)** and its guidelines provide the foundation for countries to implement and manage tobacco control. To help make this a reality, WHO introduced the MPOWER measures. These measures are intended to assist in the country-level implementation of effective interventions to reduce the demand for tobacco.

3. (d)

In News: The Central Drugs Standard Control Organisation (CDSCO) has warned about the voluntary recall of **Abbott India's popular antacid syrup Digene Gel**. Antacid syrup Digene Gel is known to relieve acidity and its symptoms such as heartburn, stomach discomfort, abdominal pain and gas.

- It can be prescribed for **gastritis** (inflammation of the stomach lining) and acid reflux (a condition where stomach acid flows back to the food pipe).

4. (b)

Only statement 2 is correct

- **Milk-alkali syndrome** is characterized by an **elevated calcium level** in the body (hypercalcemia). This causes the body's acid/base balance to shift toward alkaline (metabolic alkalosis).
- Excess of consumption of calcium supplements, usually in the form of calcium carbonate, is the cause of milk-alkali syndrome.
- A typical calcium supplement is calcium carbonate. It's frequently used to prevent or treat bone loss (osteoporosis). Calcium carbonate is also a component of antacids.

5. (c)

In Human Embryo Development, the **Primitive Streak is a linear structure** that appears in the embryo that marks its transition from having a radial symmetry (like an egg) to the **bilateral symmetry** of our bodies (marked by left and right hands and legs).

6. (a)

Apart from **malaria**, which claims the lives of over half a million people every year, mosquitoes serve as vectors for diseases like **dengue, Zika, lymphatic filariasis, and yellow fever**.

- **AIDS and Hepatitis C** are spread through **contact with blood from an infected person and not by mosquitoes**.

7. (c)

Both the Statements are correct.

- Scrub typhus, also known as bush typhus, is a disease caused by a **bacteria called Orientia tsutsugamushi**.
- Scrub typhus is spread to people through bites of **infected chiggers (larval mites)**.
- **The most common symptoms** of scrub typhus include fever, headache, body aches, and sometimes rash.
- Most cases of scrub typhus occur in rural areas of Southeast Asia, Indonesia, China, Japan, India, and northern Australia.

8. (c)

About Nipah

- **About:** Nipah is a zoonotic disease, which means it is transmitted to humans through infected animals or contaminated food.
- **Host reservoir:** The animal host reservoir of the virus is the fruit bat, commonly known as **flying fox**. Fruit bats are known to transmit this virus to other animals like pigs, and also dogs, cats, goats, horses and sheep.
- **Transmission:** The disease spreads **through fruit bats or 'flying foxes,'** of the genus **Pteropus**, who are natural **reservoir hosts of the Nipah and Hendra viruses**. **Hence statement (a) is correct.**
- **Symptoms:** Fever, headache, cough, sore throat, difficulty in breathing, and vomiting. In severe cases, disorientation, drowsiness, seizures, encephalitis (swelling of the brain) can occur, progressing to coma and death.
 - Usually, people with Nipah virus infection present with **encephalitic symptoms**. **Hence statement (b) is correct.**
 - But **in the latest outbreak**, patients presented with pure respiratory symptoms, not reported anywhere in the world before.
- **Infectivity:** The Nipah virus has low infectivity (R0 of 0.2-0.3 compared with R0 of over 1.5 in the case of SARS-CoV-2 virus).
- **Fatality:** According to the World Health Organization (WHO), Nipah has a relatively high case fatality ratio. The case fatality rate is estimated at 40% to 75%. The very high death rates contribute to low transmission. **Hence statement (c) is incorrect.**
- **Treatment:** There are currently no drugs or vaccines specific for Nipah virus infection. **Hence statement (d) is correct.**
 - Intensive supportive care is recommended to treat severe respiratory and neurologic complications.

9. (c)

TrueNat

- **Statement 1 is correct:** TrueNat is a **portable, chip-based and battery-operated machine** developed by a Goa-based company Molbio Diagnostics Private Limited. It is a cost-effective and a miniature version of the **Polymerase Chain Reaction (PCR) test**.

- **Statement 2 is correct:** It was originally developed to **detect Tuberculosis (TB) in one hour**. The World Health Organisation has approved TrueNat for detecting TB.
- ICMR has also approved the use of TrueNat for the diagnosis of infectious diseases such as **Covid and Hepatitis, among others**.

10. (a)

Statement 1 is correct: Polycystic ovary syndrome (PCOS) is a common hormonal condition that affects women of reproductive age. It is a **multifactorial endocrine disorder** which is characterized by chronic anovulation.

Statement 2 and 3 are not correct: It usually **starts during adolescence**, but symptoms may fluctuate over time.

- There is **no cure for PCOS, but treatments can improve symptoms**.

ENVIRONMENT AND ECOLOGY

1. With reference to the western hoolock gibbon, which of the following statements is/are correct?
 1. The species is found only in the Nilgiri mountains of Western Ghats.
 2. The IUCN status of the species is Endangered.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
2. Consider the following statements regarding ecocide:
 1. Ecocide constitutes the “unlawful acts committed with knowledge that there is a substantial likelihood of severe and long-term damage to the environment being caused by those acts.”
 2. The Rome Statute of the ICC deals with the ecocide.
 3. India’s Environmental (Protection) Act 1986 criminalizes the act of ecocide.How many of the above statements are correct?
(a) Only 1 (b) Only 2
(c) Only 3 (d) None of the above
3. ‘Zero draft’ of Intergovernmental negotiating committee (INC) is related to which of the following?
(a) Plastic pollution (b) Mass extinction of species
(c) Wildlife conservation (d) Garbage Segregation and sorting
4. “Global Stocktake Report” is related to which of the following?
(a) Nuclear warheads (b) Uranium deposits
(c) Freshwater presence (d) Climate action
5. Consider the following pairs:

<i>Species in News</i>	<i>IUCN Red List status</i>
1. European honeybees	Near Threatened
2. Stump-Tailed Macaques	Vulnerable
3. Western Hoolock Gibbon	Endangered

How many of the above pairs are correctly matched?
(a) Only one (b) Only two
(c) All three (d) None
6. With reference to the Project Cheetah, which of the following statements is/are correct?
 1. 20 African cheetahs have been imported and relocated in Kuno National Park under the project.
 2. The IUCN status of the African cheetah is Vulnerable.

Select the correct answer using the code given below:

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

7. Consider the following statements regarding the Addis Ababa Action Agenda, 2015:

1. It was adopted at the United Nations Climate Change Conference (COP21) in Paris, France.
2. It establishes a strong foundation to support the implementation of the 2030 Agenda for Sustainable Development.
3. It provides a new global framework for financing sustainable development by aligning all financing flows and policies.

Which of the above statements are correct?

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

8. With reference to the Nilgiri Tahr, consider the following statements:

1. It is the state animal of Tamil Nadu.
2. It is listed as vulnerable 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

9. Which of the following statements are correct about UrbanShift Forum?

1. UrbanShift is the World Bank's Sustainable Cities Impact Program.
2. It is led by the UN Environment Programme and implemented in partnership with Asian Development Bank among other partners.
3. The program supports more than 23 cities in 9 countries.

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

10. Species-Bruguiera, Rhizophora, and Sonneratia, recently seen in the news, belong to which of the following?

- (a) Mangrove (b) Fish
(c) Butterfly (d) Himalayan herb

11. Which of the following statement(s) is correct regarding India's newly launched Green Hydrogen Fuel Cell Buses?

1. The fuel cell utilizes Hydrogen and Water to generate electricity to power the bus.
2. The buses are effluent-free.
3. Their refueling time is lesser compared to the battery-operated Electric Vehicles.

Select the correct answer using the code given below:

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

12. With reference to the 'Market Development Assistance' of the GOBARdhan Scheme, consider the following statements:

1. It has been rolled out by the Ministry of Commerce and Industry.
2. It focuses on efficient organic waste management.

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. Consider the followings pairs:

Species in news

1. Javan Rhinos
2. White Rhinos
3. Greater One-Horned Rhinos

UCN Red list status

- Critically Endangered
Near Threatened
Vulnerable

How many of the above pairs are correctly matched?

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

14. Consider the following pairs:

Tiger Reserves

1. Ranipur
2. Kamlang
3. Navegaon Nagzira
4. Sathyamangalam

States

- Uttarakhand
Arunachal Pradesh
Maharashtra
Kerala

How many pairs given above are correctly matched?

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

15. With reference to the Bolson Tortoise, consider the following statements:

1. It is also known as Mexican Tortoise or yellow margined Tortoise.
2. It is listed as vulnerable in the IUCN red list of threatened species.
3. These species can go upto a year without drinking water.

How many statements given above are correct?

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

EXPLANATIONS

1. (b)

Statement 1 is not correct and 2 is correct.

Western Hoolock Gibbon

- Gibbons are the **smallest and fastest of all apes**. The **hoolock gibbon** (India's only ape), unique to **India's northeast**, is one of 20 species of gibbons found in **tropical and subtropical forests in Southeast Asia**.
- **Characteristics:** Gibbons are highly **intelligent creatures** with distinct personalities and **strong family bonds**, similar to other apes. They are **diurnal, arboreal, omnivorous** and known for their energetic vocal displays.
- **Conservation Status:**
 - **IUCN Status:** Endangered.
 - **Schedule I** of Wildlife Protection Act 1972



2. (a)

Statement (1) is correct: Ecocide constitutes the “unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.”

- The **Rome Statute of the ICC** deals with four atrocities: genocide, crimes against humanity, war crimes, and the crime of aggression **but not the ecocide. Hence, statement (2) is not correct.**
- India’s legislative framework, Environmental (Protection) Act 1986 **does not deal with the act of ecocide. Hence, statement (3) is not correct.**

3. (a)

The ‘zero draft’

- The **Intergovernmental negotiating committee (INC)** to develop an international legally binding instrument on plastic pollution, recently released a **zero draft**.
- **The text is divided into four parts:**
 - **Part I:** It covers the objectives of the instrument and leaves placeholders, as requested at the second session of the committee from May 29-June 2 for elements that Members may wish to include but were not discussed at the second session.
 - **Part II:** Elements in this Part are broadly structured around the life cycle of plastics and plastic products with the aim of addressing plastic pollution.
 - It aims to collectively promote the sustainable production and consumption of plastics through product design and environmentally sound waste management, including through resource efficiency and circular economy approaches.
 - **Part III & IV:** The third and fourth parts outline different options of measures aimed at collectively addressing the implementation of the instrument.

4. (d)

Global Stocktake is essentially a **periodic review of global climate action** which aims to assess whether current efforts will enable us **to reach the objectives set out in the Paris Agreement**.

- It is expected to take place **once every five years**.

5. (b)

European honeybees (Western Honey Bee)

- It is native to Europe, Africa, the Middle East and western Asia.
- **Data Deficient** on the IUCN Red List. **(Incorrectly Matched)**

Stump-Tailed Macaques are also called the bear macaque.

- The natural habitat of Stump-tailed macaques consists of subtropical and tropical broadleaf evergreen forest. It is found in South Asia. They are listed as **‘vulnerable’** on the IUCN Red List of species. **(Correctly Matched)**

Western Hoolock Gibbon requires contiguous, wet, closed-canopy forests for its survival.

- It inhabits the jungles with tall trees on the southern bank of the Brahmaputra (Assam)-Dibang (Arunachal Pradesh) river system.
- It is found in eastern Bangladesh, northeastern India, and northwestern Myanmar. It is classified as **endangered**. (Correctly Matched)

6. (c)

Both the Statements are correct.

- Project Cheetah, completed one year when the first batch of eight cheetahs from Namibia arrived on September 17, 2022 in India.

What is Project Cheetah?

- Project Cheetah is **India's cheetah relocation programme**. It aims to bring back independent India's only extinct large mammal.
- As part of the project, **50 cheetahs** will be introduced in various National Parks **over five years**.
- **The goal of the introduction** of African cheetahs is to "establish viable cheetah metapopulation in India that allows the cheetah to perform its functional role as a top predator and provides space for the expansion of the cheetah within its historical range thereby contributing to its global conservation efforts."

Status of the Project Cheetah

- In total, 20 adult African cheetahs have been imported so far and were relocated in **Kuno National Park**.
- The first batch of **eight cheetahs** arrived in **September 2022 from Namibia** and another batch of **12 cheetahs from South Africa** arrived in February 2023.

African Cheetah

- **IUCN status:** vulnerable
- **Distribution:** Around 6,500-7,000 African cheetahs are present in the wild.

7. (b)

The Addis Ababa Action Agenda, 2015, was adopted at the **Third International Conference on Financing for Development** (Addis Ababa, Ethiopia, 13-16 July 2015). **Hence, Statement 1 is not correct.**

- The Action Agenda **establishes a strong foundation to support the implementation of the 2030 Agenda for Sustainable Development**. **Hence, statement 2 is correct.**
- It provides a **new global framework for financing sustainable development** by aligning all financing flows and policies with economic, social and environmental priorities. **Hence, statement 3 is correct.**
- It includes a **comprehensive set of policy actions, with over 100 concrete measures** that draw upon all sources of finance, technology, innovation, trade, debt and data, in order to support achievement of the Sustainable Development Goals.

8. (a)

In News : Tamil Nadu is working on a standardized protocol to count the population of the Nilgiri Tahr.

Statement 1 is Correct: Nilgiri tahr is endemic to the Western ghats and locally known as 'Varaiaadu'. **It is the State animal of Tamil Nadu.**

- The Nilgiri tahr is the only mountain ungulate in southern India amongst the 12 species present in India.

Statement 2 is not correct: The population of Nilgiri Tahr has been estimated at 3,122 individuals in the wild as per a report released by WWF India in 2015.

- **IUCN status: Endangered**
- It is protected under Schedule I of the Wildlife (Protection) Act of India, 1972.

9. (b)

Statement 1 is not correct: UrbanShift is **Global Environment Facility's (GEF's) Sustainable Cities Impact Program**.

- It is **led by the UN Environment Programme** and implemented in partnership with the World Resources Institute, C40 Cities, ICLEI, the UN Development Programme, the World Bank and the Asian Development Bank. **Hence, Statement 2 is correct.**
- The program **supports more than 23 cities in 9 countries** and has a focus on integrated urban planning, low-carbon infrastructure, sustainable waste management and nature-based solutions for urban sustainability. **Hence, Statement 3 is correct.**

10. (a)

Bhitarkanika National Park is home to several **mangrove tree species, including those of Avicennia, Bruguiera, Rhizophora, Sonneratia and Kandelia genera.**

- In India, there are 34 species of true mangroves. Bhitarkanika (Orissa) has 31 species, the Sundarbans have 27, and the Andaman & Nicobar islands have 24 species.

11. (d)

Green Hydrogen Fuel Cell Bus

- Recently, the 1st Green Hydrogen Fuel Cell Bus was flagged-off from Kartavya Path, New Delhi.

Significance

- **The most environmentally friendly mode of transportation:**
 - The fuel cell utilizes **Hydrogen and Air** to generate electricity to power the bus.
 - The **only effluent from the bus is water** and could be the most environmentally friendly mode of transportation to date. **Hence, Both statements 1 and 2 are not correct.**
- **Efficiency and cost effectiveness:**
 - High efficiency of fuel cell vehicles and the high energy density of hydrogen ensures that the operational costs in rupees per kilometre for fuel cell trucks and buses are **lower than diesel-powered vehicles**
 - This could also bring **freight revolution in India.**
- **Better than electric vehicles:**
 - They enable a **refuelling time of just 5 minutes**, compared to **30-45 minutes of charging** for a Battery operated Electric Vehicle. **Hence, statement 3 is correct.**
 - Also, cars get **better energy storage per unit volume and weight**, freeing up a lot of space for other things.
 - It is also **effective for sectors that cannot be electrified** like **shipping and air travel.**

12. (b)

Statement 1 is not correct:

- **Market Development Assistance (MDA)** has been rolled out by the **Department of Fertilisers** with focused guidelines to promote production and uptake of organic **Fertilisers from Galvanising Organic Bio-Agro Resources Dhan (GOBARdhan) plants.**

- It has been launched with a robust budget of Rs. 1451.82 Crore **for three years** (FY 2023-24 to FY 2025-26).

Statement 2 is correct:

- **MDA** acts as a leveller by **curbing chemical fertiliser overuse** and ensuring **Integrated Nutrient Management**.
- It focuses on twin objectives of **efficient organic waste management** and bolstering **soil organic carbon in agricultural soils**, creating fertile ground for organic farming.

13. (c)

World Rhino Day is celebrated on September 22 every year.

- Rhinoceroses are large, herbivorous mammals identified by their characteristic horned snouts.
- There are **five species** of rhino; some have **two horns, while others have one**.
- **Conservation status of the five species are:**
 - Javan Rhinos: **Critically Endangered**
 - Sumatran rhinos : **Critically Endangered**
 - Black rhinos: **Critically Endangered**
 - White rhinos : **Near Threatened**
 - Greater One-Horned Rhinos : **Vulnerable**

14. (b)

Pair 1 is incorrectly matched: Ranipur Tiger Reserves is located in Uttar Pradesh.

Pair 2 is correctly matched: Kamlang Tiger Reserves is located in Arunachal Pradesh.

Pair 3 is correctly matched: Nawegaon Nagzira Tiger Reserves is located in Maharashtra.

Pair 4 is incorrectly matched: Sathyamangalam Tiger Reserves is located in Tamil Nadu.

15. (b)

Statement 1 is correct: About Bolson Tortoise:

- **Scientific Name:** *Gopherus flavomarginatus*
- It is also known as **Mexican Tortoise or yellow margined Tortoise**.
- It is the largest and rarest land reptile, as well as the rarest of the six Gopherus species native to North America.

Statement 2 is not correct: IUCN Status: Critically Endangered

Statement 3 is correct: Habitat:

- They are exclusively found in the northern Mexican states of Chihuahua, Coahuila and Durango.
- Their habitat is a semi-hot desert climate with winter temperatures around 2.8°C and summer temperatures ranging to 36.3°C.

These species can go **upto a year without drinking water**. They use their bladder as a reservoir for freshwater.

MISCELLANEOUS

1. With reference to the People for the Ethical Treatment of Animals (PETA) India, consider the following statements:
 1. It is a statutory and advisory body for the Government of India.
 2. It operates under the principle that animals are not to experiment or abuse in any other way.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
2. The partnership named, 'Education to Entrepreneurship: Empowering a generation of students, educators and entrepreneurs', recently signed between which of the following institutions?
 - (a) World Bank and UNESCO
 - (b) The Ministry of Education, Ministry Skill Development & Entrepreneurship and Meta
 - (c) WEF and UNESCO
 - (d) The Ministry of Home Affairs, Ministry Commerce & Industry and Meta
3. Recently Malviya Mission was in news, it is related to which one of the following?
 - (a) Skill Development programme for minorities
 - (b) Teachers training Programme
 - (c) Healthcare initiative in rural areas
 - (d) Urban area development mission
4. With reference to Indian Knowledge Systems (IKS) , consider the following statements:
 1. It is an innovative cell under the Ministry of Education (MoE) .
 2. It is actively engaged only in Agriculture and Economics research .Which of the following statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
5. "American XL bully" recently seen in the news, related to which of the following?
 - (a) Water Body
 - (b) Rocket launcher
 - (c) Animal
 - (d) Prevailing wind
6. With reference to the World Federation of the Deaf (WFD), which of the following statements is/are correct?
 1. It is an international non-profit and non-governmental organization of deaf associations from 133 countries.
 2. The headquarters of WFD is located in Geneva, Switzerland.

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 World Federation for Medical Education (WFME), consider the following statements:
1. It is a global organization established in 1972 dedicated to enhancing the quality of medical education worldwide.
 2. It launched its program to define international standards for medical education in 1997.
 3. It has granted the recognition status to the National Medical Commission (NMC), India.
- How many statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
8. Dadasaheb Phalke Lifetime Achievement Award for the year 2021 was recently awarded to which of the following personalities?
- (a) Hema Malini (b) Waheeda Rehman
(c) Jaya Prada (d) Asha Parekh
9. Consider the following statements about the National Service Scheme:
1. It is a Central Sector Scheme of the Ministry of Social Justice and Empowerment.
 2. It provides opportunity to the student from primary school level to 12th Class to take part in various Government led activities.
 3. Its primary objective is to develop the personality and character of the student youth through voluntary community service.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

EXPLANATIONS

1. (b)

Statement 1 is not correct:

- PETA India is **not a statutory body**, but it is a **company limited** by guarantee not for profit under the Companies Act, 1956.

Statement 2 is correct:

- It is based in Mumbai that operates under the simple principle that **animals are not to experiment on**, eat, wear, use for entertainment, or abuse in any other way.
- It focuses primarily on the areas in which the greatest numbers of animals suffer the most, like in laboratories, food industry, leather trade, and entertainment business.

2. (d)

Option d is correct: A 3-year partnership “**Education to Entrepreneurship: Empowering a generation of students, educators and entrepreneurs**” between the Ministry of Education, Ministry Skill Development & Entrepreneurship and **Meta** was launched recently.

- **Guided by the tenets of New Education Policy, META's partnerships with NIESBUD (Ministry of Skill Development), CBSE & AICTE (Ministry of Education) will catalyse infinite possibilities for equipping the population with critical digital skills and empowering micro entrepreneurs and small businesses.**
- The initiative launched in pursuance of **the vision of making India a skill capital of the world and transforming our Amrit Peedhi** into new-age problem solvers and entrepreneurs.

3. (b)

Malaviya Mission - Teacher Training Programme is organized by the **University Grants Commission (UGC)**, in association with the **Ministry of Education**.

- **The two-week online programme** shall focus on various themes identified for course curriculum/content for capacity building of faculty members at higher educational institutions.

Significance

- The programme shall help develop **innovative teaching methods** and high-level institutional facilities in all the constituent areas of higher education.
- It aims to improve the quality of teachers training, build leadership skills in teachers and help realize the goals of **National Education Policy (NEP)**.

4. (a)

Sarp-Rajju and five other indoor games have been developed by **Indian Knowledge Systems (IKS)** to promote interdisciplinary research on aspects of indigenous knowledge.

Statement 1 is correct : Indian Knowledge Systems (IKS) is an innovative cell under the **Ministry of Education (MoE)** at All India Council for Technical Education (AICTE) , New Delhi.

- It is established to promote interdisciplinary research on all aspects of IKS, preserve and disseminate IKS for further research and societal applications.

Statement 2 is not correct : It actively engages in spreading the rich heritage of our country and traditional knowledge in the field of **Arts and literature, Agriculture, Basic Sciences, Engineering & Technology, Architecture, Management, Economics, etc.**

5. (c)

UK Prime Minister Rishi Sunak said American bully XL dogs would be banned by the end of the year after a series of serious attacks, in some cases fatal, in recent years. **American bully XL** has a heavy bone structure and a stocky, muscular body.

- It is the largest of four types of American Bully: standard, pocket, classic and XL.
- It is believed to be developed in the 1990s and bred from a number of breeds including the American pit bull terrier, which was banned in the UK in 1991.

6. (a)

Statement 1 is correct and 2 is not correct.

World Federation of the Deaf (WFD)

- **WFD** is an international **non-profit and non-governmental** organization of deaf associations from **133 countries**.
- **Established:** 23 September, 1951 in Rome, Italy, at the first World Deaf Congress.
- **Headquarters:** Helsinki, Finland
- **It promotes** the human rights of deaf people in accordance with the principles and objectives of the **United Nations Charter, Universal Declaration of Human Rights, UN Convention on the Rights of Persons with Disabilities (CRPD), 2030 Agenda and Sustainable Development Goals (SDGs)**, and other Human Rights Treaties.

- The WFD has a consultative status in the **United Nations** and is a founding member of the **International Disability Alliance (IDA)**.

7. (c)

All three statements are correct: The National Medical Commission (NMC), India has been granted the **World Federation for Medical Education (WFME) Recognition Status** for a tenure of **10 years**.

About World Federation for Medical Education (WFME):

- WFME began in **1972**, bringing together the **World Health Organization (WHO)**, regional medical education associations from around the world, and other partners.
- It is a global organization **dedicated to enhancing the quality of medical education worldwide**.
- WFME believes that medical education should have **common high standards internationally** and that the **best practices in medical education should be disseminated globally**.
- WFME launched its program **to define international standards for medical education in 1997**.
- WFME's accreditation program plays a pivotal role in **ensuring that medical institutes meet and uphold the highest international standards of education and training**.

8. (b)

Veteran Bollywood actor Waheeda Rehman would be conferred with the Dadasaheb Phalke Lifetime Achievement Award for 2021.

- Ms Rehman has been critically acclaimed for her roles in Hindi films, prominent among them, **Pyasa, Kaagaz ke Phool, Chaudhavi Ka Chand, Saheb Biwi Aur Ghulam, Guide, Khamoshi** and several others.
- She was also **honored with the Padma Shri** by the Government of India in 1972, later receiving the **Padma Bhushan** in 2011.

9. (a)

In News : The President of India presented the National Service Scheme Awards for the year 2021-2022 at Rashtrapati Bhavan recently.

Statements 1 and 2 are incorrect. The National Service Scheme (NSS) is a **Central Sector Scheme** of Government of India, **Ministry of Youth Affairs & Sports**.

- It provides opportunity to the student youth of **11th & 12th Class of schools at +2 Board level and student youth of Technical Institution, Graduate & Post Graduate at colleges and University level** of India to take part in various Government led community service activities & programmes.

Statement 3 is correct : The primary objective of **developing the personality and character of the student youth** through voluntary community service.