

DAILY MCQs COMPILATION

with

EXPLANATIONS

JULY 2023

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HISTORY, ART & CULTURE

1. Consider the following pairs:

Countries

1. India
2. Sri Lanka
3. Thailand

Festival

- Ashadha Purnima
Esala Poya
Asanha Bucha

How many pairs given above are correctly matched?

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

2. Consider the following pairs:

Freedom Fighter

1. Tirok Sing
2. Veer Surendra Sai
3. Paona Brajabashi
4. Laxman Naik

Tribal Revolt

- The Khasi Rebellion of 1833
Koraput Revolt, 1942
Khongjom Battle of 1891
Soren Revolt 1872

How many pairs given above are correctly matched?

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

3. He was born on 04 July 1897, in a village in Andhra Pradesh, he is also known as “Manyam Veerudu” (Hero of the Jungle).

Which historical personality has been described above?

- (a) Narayan Singh (b) Alluri Sitarama Raju
(c) Govind Guru (d) Birsa Munda

4. With reference to the Lambani Art, consider the following statements:

1. It is a traditional form of art and craft practised by the Banjara community in Karnataka.
2. Lambani art includes a wide range of products, such as clothing, textiles, accessories, home decor items, and jewellery.
3. The Lambani community is mainly present in the Southern part of India only.

How many of the statements given above are correct?

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

5. Consider the following statements about Nawab Wajid Ali Shah:
1. Wajid Ali Shah started two distinct forms of Qawwali i.e. Rahas and Raas.
 2. He established the famous Parikhaana (abode of fairies) in which girls were taught music and dancing by expert-teachers.
 3. The famous poet Mirza Ghalib was a contemporary of Nawab Wajid Ali Shah.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
6. With reference to Namda Art, consider the following statements:
1. Namdas are a kind of woolen shawls, originally from Kashmir.
 2. High quality wool mixed with a small quantity of nylon is used to manufacture namdas.
 3. Namda is a craft made for all types of climates.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
7. With reference to Rudragiri rock art, which of the following statements is/are correct?
1. The site unveils a combination of rock paintings from the Mesolithic period and artwork from the Kakatiya dynasty.
 2. The Rudragiri hillock is situated in Western Ghat.
- 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. From the following persons, who was associated with the 'Deekshabhoomi Smarak Samiti', which was recently in news?
- (a) Jyotiba Phule (b) Savitri Bai Phule
(c) RS Gavai (d) Mahatma Gandhi
9. With reference to the Lippan Art, consider the following statements:
1. The mural tradition art form is from the Kutch region of Gujarat.
 2. The word 'Lippan' means 'clay' or 'dung' in local Gujarati.
 3. The work is limited mainly to the outer walls of the circular adobes.
- How many statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

EXPLANATIONS

1. (c)

The International Buddhist Confederation (IBC), under the aegis of the Ministry of Culture celebrated Ashadha Purnima, as the **Dharma Chakra Pravartana Divas**.

- The auspicious day of **Ashadha Purnima**, which falls on the full moon day of the month of Ashadha as per the Indian lunar calendar, is also known as **Esala Poya in Sri Lanka and Asanha Bucha in Thailand**.

- The day marks Buddha's first teaching after attaining Enlightenment to the first five ascetic disciples on the full-moon day of Ashadha at 'Deer Park', Risipatana Mrigadaya in the present day Sarnath, near Varanasi, India.

2. (c)

Pair 1 is correct: Tirot Sing

- State: Meghalaya
- Movement: **The Khasi Rebellion of 1833**
- Start Year: 1833
- Tirot Sing, also known as U Tirot Sing Syiem was a Khasi chief of the early 19th century.
- He drew his lineage from the Syiemlieh clan and declared war and fought against British for attempts to take over control of the Khasi Hills. In the Anglo-Khasi War, the Khasis resorted to guerrilla activity, which dragged on for about four years.
- Tirot Sing was eventually captured by the British in January 1833 and deported to Dhaka.

Pair 2 is not correct: Veer Surendra Sai

- State: Odisha
- Movement: **1857 Rebellion of Sambalpur**
- Start Year: 1857
- Surendra Sai was born in the year 1809 in Rajpur Khinda, located about 35 kms. from Sambalpur.
- Next in line to the throne of Sambalpur after the death of Maharaja Sai in 1827, Surendra Sai helped the tribal people in the fight against the British by encouraging their language and cultural development.
- He was a man with great military genius. He guarded the passes to check military inflow of the Britishers in Sambalpur.
- During the 1857 Mutiny, the Hazirabagh Jail was broken down and prisoners were liberated including Veer Surendra Sai. The 1857 rebellion of Sambalpur was essentially a tribal rebellion.

Pair 3 is correct: Paona Brajabashi

- State: Manipur
- Movement: **Khongjom Battle of 1891**
- Start Year: 1891
- The Anglo-Manipuri war or the Khongjom Battle broke out in 1891. Attempting to resist British forces marching from Tamu, 700 Manipuri soldiers were dispatched to Thoubal led by Major General Paona Brajabashi, a brave soldier of the kingdom of Manipur.
- Manipur celebrates Khongjom Day every year on 23rd April.

Pair 4 is not correct: Laxman Naik

- State: Odisha
- Movement: **Koraput Revolt, 1942**
- Start Year: 1942
- Laxman Naik, belonging to the Bhumia tribe of Odisha, was accepted as the tribal leader by the people of Koraput and its surrounding region like Malkanagiri and Tentulipada.
- The tribal people devoted themselves for the cause of national freedom. He mobilized the tribal people for development works like construction of roads, building bridges and establishing schools.

- He asked the villagers not to pay any tax. He spearheaded the fight against colonial oppression and exploitation.
- During the Quit India Movement 1942, he was nominated to represent Matili. He used nonviolence as a main weapon against colonial power.
- The tribal people called him "Gandhi of Malkangiri."

3. (b)

Alluri Sitarama Raju: He was born on **04 July 1897**, in a village called Mogallu near Bhimavaram in Andhra Pradesh, Alluri Sitarama Raju was a sanyasi and a strong believer in justice who raised his voice against unlawful British policies.

He had led the **Rampa rebellion**, which was launched in **1922**. He was honoured for his valour and fiery spirit with the title, "**Manyam Veerudu**" (Hero of the Jungle).

4. (b)

Statement 1 is correct: It is a traditional form of art and craft practised by the **Lambani community**, also known as the **Banjara community in Karnataka**.

Statement 2 is correct: Lambani embroidery is a vibrant and intricate form of textile embellishment characterized by colourful threads, mirror work, and a rich array of stitch patterns.

Lambani art includes a wide range of products, such as clothing, textiles, accessories, home decor items, and jewellery. It received the **status of Geographic Indication (GI) tag in 2010 from Karnataka**.

Lambani craft tradition involves **skillfully stitching together small pieces of discarded fabric** to create a beautiful fabric.

Statement 3 is not correct: Lambanis, also called **Lambadis or Banjaras**, were nomadic tribes who came from Afghanistan to Rajasthan and have now spread themselves across Karnataka and other parts of India. The language of Banjara is known as "**Gorboli**" "**Gor mati Boli**" or "**Brinjari**" an independent dialect (under the category of Indo-Aryan language).

They are **known by different names like:**

- Lambada or Lambadi, Sukali in Andhra Pradesh
- Lambani in Karnataka
- Gwar or Gwaraiya in Rajasthan

5. (b)

Wajid Ali Shah started two distinct forms of **Kathak**, one is **Rahas** and the other one is called **Raas**. **Hence, Statement 1 is not correct.**

- He established the famous **Parikhaana** (abode of fairies) in which hundreds of beautiful and talented girls were taught music and dancing by expert-teachers engaged by the royal patron. **Hence, Statement 2 is correct.**

- The famous poet **Mirza Ghalib** received the gracious patronage of Wajid Ali Shah, who granted him a pension of Rupees five hundred per year in 1854. **So, Statement 3 is correct.**

6. (a)

Statement 1 and 2 are not correct: Namdas are a kind of **mattress**, originally from Kashmir.

- The art involves **felted the wool** rather than weaving it. **Low quality** wool mixed with a **small quantity of cotton** is used to manufacture namdas.
- They are usually of two types, **plain and embroidered**. Formerly, woolen yarn was used for embroidery, but now acrylic yarn (cashmilon) is in use.

Statement 3 is correct: The craft is primarily practiced by the **Pinjara and Mansuri communities, Sama Muslims native to Kachchh.**

Namda is a craft **made for all types of climates.**

7. (a)

Statement 1 is correct: This site unveils a combination of prehistoric rock paintings from the **Mesolithic period** around 5000 B.C, and exquisite artwork from the **Kakatiya dynasty.**

The paintings, adorned with a variety of colours derived from **white kaolin** and different pigments, depict captivating scenes from the epic Ramayana.

Statement 2 is not correct: Rudragiri hillock, nestled amidst the **Eastern Ghats**, features five naturally formed rock shelters at its foothills, facing westward. It is located in the village of Orvakallu, in Guntur district of **Andhra Pradesh.**

8. (c)

Ramkrishna Suryabhan Gavai (1929-2015):

- Ramkrishna Suryabhan Gavai, known as **“Dadasaheb”** to his followers and admirers, was the **founder of the Ambedkarite outfit Republican Party of India**, and was a chairman of the **Deekshabhoomi Smarak Samiti** in Nagpur.
- He served as the **Governor** of Bihar, Sikkim, and Kerala between 2006 and 2011, when the Congress-led UPA was in power at the Centre.
- He was active in **Maharashtra politics** from 1964 to 1998. In 1998, he was elected to Lok Sabha from the Amravati constituency as a candidate of the Republican Party of India (RPI).

9. (b)

Statement 1 and 2 are correct: The word ‘Lippan’ means ‘clay’ or ‘dung’ in local Gujarati. Lippan Art is essentially **mud-relief work** that incorporates mirrors. The mural tradition art form is from the **Kutch region of Gujarat.**

- Lippan Art is practiced mainly by the **Rabari, Kumbhar, Marwada Harijan and Mutwa communities** but most Lippan artisans today trace their origins to the Kumbhar community.
- **Statement 3 is not correct:** Though the work is limited **mainly to the interior walls**, it can be found on the **outer walls as well of the circular adobes** that these communities live in.



ECONOMY

1. With reference to the external debt, consider the following statements:
 1. A country can pay external debt in its domestic currency as well.
 2. It can only be borrowed from the International Monetary Fund (IMF), World Bank, and Asian Development Bank (ADB).
 3. As per the RBI India's external debt has risen up during the financial year 2023.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
2. Consider the following statements:
 1. Credit bureaus are organizations that collect, analyze, and maintain credit data on borrowers, businesses, and organizations.
 2. They are licensed by the Securities and Exchange Board of India.
 3. Credit reports can only be provided to borrowers and government agencies.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
3. With reference to the special Window for Affordable and Mid-Income Housing (SWAMIH) Investment Fund I, consider the following statements:
 1. The fund is sponsored by the Ministry of Housing & Urban Poverty Alleviation.
 2. It is a special fund established in 2019 for the women and weaker sections of the both urban and rural 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
4. Which among the following are the benefits of Currency Internationalization by any country?
 1. It limits exchange rate risk.
 2. It facilitates access to international financial markets.
 3. It creates new opportunities for the country.
 4. It boost capital formationSelect the correct answer using the code given below:
 - (a) 1 and 2 only
 - (b) 2 and 4 only
 - (c) 1, 2, 3 only
 - (d) 1, 2, 3, and 4

5. With reference to the Global Multidimensional Poverty Index (MPI), consider the following statements:
1. Cooking fuel and Electricity are among the indicators used to measure poverty.
 2. As per the MPI 2023, over 18% people are estimated to live in acute multidimensional poverty.
 3. In MPI 2023, India's deprivation in all indicators have increased.
- 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 regarding National Bank for Agriculture and Rural Development (NABARD):
1. It is an apex regulatory body for overall regulation of regional rural banks and apex cooperative banks in India.
 2. It was established on the recommendations of the Rajamannar Committee in 1972.
 3. It is under the jurisdiction of the Ministry of Finance.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
7. Consider the following statements regarding the Standing Committee on Statistics (SCoS):
1. SCoS has recently replaced the Standing Committee on Economic Statistics (SCES).
 2. SCoS has 10 official members and four non-official members who are eminent academics.
 3. The Standing Committee on Economic Statistics had a broader mandate over the newly formed SCoS.
- Select the correct answer using the code given below:
- (a) 1 only (b) 1 and 2 only
(c) 2 only (d) 2 and 3 only
8. With reference to the Export Preparedness Index 2022 report, which of the following statements is/are correct?
1. It is a comprehensive tool which measures the export preparedness of the States and UTs in India.
 2. It is released by the Ministry of Commerce and Industry.
 3. Tamil Nadu has topped the State in Export Preparedness Index (EPI) for 2022.
- 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) 3 Only
9. With reference to the National Multidimensional Poverty Index (MPI), consider the following statements:
1. In addition to the ten indicators of the global MPI model, it also adds two indicators i.e. Maternal Health and Bank Accounts.
 2. As per the progress review of 2023 urban areas witnessed the fastest decline in poverty as compared to rural areas.
 3. Uttar Pradesh registered the largest decline in the number of poor people.

How many statements given above are correct?

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

10. Which of the following is/are the features of the Sahara Refund Portal?

1. The portal can be accessed through the Ministry of Cooperation website.
2. The depositors will be verified through Aadhaar card to ensure their identity.
3. The money will be deposited into the bank account of the claimants within 180 days.

Select the correct answer using the code given below:

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

11. Consider the following statements about ONDC Academy:

1. It was launched by ONDC in collaboration with Bombay Stock Exchange.
2. Any person without any knowledge of e-commerce can learn how to make a seller app with a technology service provider.
3. It is a Ministry of Electronics and Information Technology initiative to create a facilitative model to help small retailers take advantage of digital commerce.

How many of the statements given above are correct?

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

12. With reference to Bharat Mandalam, consider the following statements:

1. It is the International Exhibition-cum-Convention Centre (IECC) complex developed as a National project.
2. It aims to attract foreign tourists to India.

Which of the statements given above is/are correct?

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

13. Which of the following comes under the Central Consumer Protection Authority (CCPA)?

1. Violations of consumer rights
2. Unfair trade practices
3. Misleading advertisements

Select the correct answer using the code given below:

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

EXPLANATIONS

1. (a)

Statement 1 and 2 are not correct:

What is the External Debt of a country?

- It refers to **money borrowed from a source outside the country**. External debt has to be paid back in the **currency** in which it is borrowed.

- **Sources**

- External debt can be obtained from **foreign commercial banks, international financial institutions** like **International Monetary Fund (IMF), World Bank, Asian Development Bank (ADB)** etc and from the government of foreign nations.
- Normally these types of debts are in the form of **tied loans**, meaning that these have to be used for a predefined purpose as determined by a consensus of the borrower and the lender.
- Governments and corporations are eligible to raise loans from abroad. These are in the form of **external commercial borrowings**. The interest rate on foreign loans is linked to **LIBOR (London Interbank Offer rate)** and the actual rate will be **LIBOR plus** applicable spread, depending upon the credit rating of the borrower.

Statement 3 is correct: As per the RBI India's **external debt has risen** up to \$624.7 billion during the financial year 2023.

India's external debt at end-March 2023 rose by **\$5.6 billion to \$624.7 billion** from the year-earlier period but the external **debt-to-GDP ratio** slid to **18.9%** at end-March from 20% a year earlier.

2. (a)

Statement 1 is correct: Credit Information Companies, also called **credit bureaus**, are organizations that collect, analyze, and maintain credit data on borrowers, businesses, and organizations.

CIBIL is the **oldest and most well-known credit information company in India**. The top four credit information companies in India are:

- Credit Information Bureau (India) Limited (CIBIL)
- Equifax
- Experian
- CRIF Highmark

Statement 2 and 3 are not correct: They are licensed by the **Reserve Bank of India**.

Credit reports can only be provided to the following people or authorities upon request:

- Borrower's employer
- Borrower's landlords
- Utility service providers
- Government of India
- Lenders, banks, financial institutions
- Any third party (only after the written request from the borrower).

3. (d)

Both Statement 1 and 2 are not correct: SWAMIH Investment Fund I is a social impact fund specifically formed for completing stressed and stalled residential projects.

- It is considered as the **lender of last resort for distressed projects**.
- **It considers** first-time developers, established developers with troubled projects, developers with a poor track record of stalled projects, customer complaints and NPA accounts, and even projects where there are litigation issues.
- The Fund is **sponsored by the Ministry of Finance**, Government of India, and is **managed by SBICAP Ventures Ltd., a State Bank Group company**.
- It was launched in **2019**.

4. (d)

In News: Inter-Departmental Group of RBI has released the report & recommendations for Internationalisation of rupee.

What is an International Currency?

- A currency can be termed “international” if it is **widely accepted worldwide as a medium of exchange**.
- Just like a domestic currency, an international currency performs the three functions of money – **as a medium of exchange, a unit of account, and a store of value**.
- An international currency is used and held beyond the borders of the issuing country for transactions between **residents and non-residents, and between residents of two countries other than the issuing country**.

Benefits of Currency Internationalization

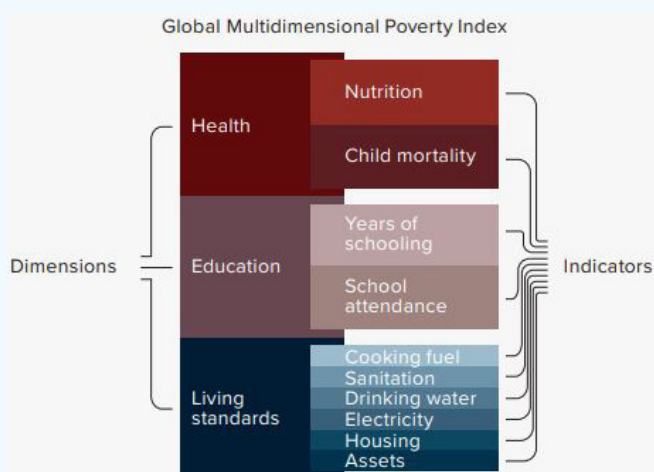
- **Limit Exchange Rate Risk:** As the internationalisation of a country’s currency broadens and deepens its financial market, domestic firms may be able to invoice and settle their exports/imports in their currency, thus shifting exchange rate risk to their foreign counterparts.
- **Access to international financial markets:** It permits domestic firms and financial institutions to access international financial markets without assuming exchange rate risk.
- **New opportunities:** It offers new profit opportunities to financial institutions, although this benefit may be offset in part by the entry of foreign financial institutions into the domestic financial market (to the extent that the government permits it).
- **Boost capital formation:** A larger, more efficient financial sector may serve the domestic non-financial sector better by reducing the cost of capital and widening the set of financial institutions that are willing and able to provide capital. This would boost capital formation in the economy thereby increasing growth and reducing unemployment.
- **Finance Budget Deficit of Government:** Currency internationalisation may, of course, allow a country’s government to finance part of its budget deficit by issuing domestic currency debt in international markets rather than issuing foreign currency instruments.
- **Foreign exchange reserves:** The internationalisation of a currency reduces the requirement for the authorities to maintain and depend on large foreign exchange reserves in convertible currencies to manage external vulnerabilities.

5. (b)

Recently, the Global Multidimensional Poverty Index (MPI) 2023 has been released.

Statement 1 and 2 are is correct: It has been jointly published by the Human Development Report Office (HDRO) of the **United Nations Development Programme** and the **Oxford Poverty and Human Development Initiative (OPHI)** at the University of Oxford since 2010.

It tells about **how prevalent poverty** is in the world and provides insights into the lives of poor people, their deprivations and how intense their poverty is—to inform and accelerate efforts to end poverty in all its forms.



- **485 million poor people** live in **severe poverty** across 110 countries, experiencing **50–100%** of weighted deprivations. Over **18% people** are estimated to live in **acute multidimensional poverty**.
- **Statement 3 is not correct:** 25 countries, including India, successfully **halved their global MPI values within 15 years**, showing that rapid progress is attainable.
- **Deprivation in all indicators declined.**
 - People who are multidimensionally poor and deprived under the nutrition indicator in India declined from **44.3% in 2005-06 to 11.8% in 2019-21**, and **child mortality** fell from **4.5% to 1.5%**.
 - Deprivation of **cooking fuel** fell from **52.9% to 13.9%** and those deprived of **sanitation** fell from **50.4% in 2005-2006 to 11.3% in 2019-2021**.
 - In the **drinking water indicator**, the percentage of people who are multidimensionally poor and deprived fell from **16.4 to 2.7** during the period, **electricity from 29 to 2.1 and housing from 44.9 to 13.6**.

6. (b)

Statement 1 is correct: It is an apex regulatory body for overall regulation of regional rural banks and apex cooperative banks in India.

- NABARD was established on the recommendations of **B. Sivaraman Committee** in 1982 to implement the National Bank for Agriculture and Rural Development Act 1981. **Hence, Statement 2 is not correct.**

Statement 3 is correct: It is under the jurisdiction of the Ministry of Finance, Government of India.

- **Functions:** NABARD supervises State Cooperative Banks (StCBs), District Cooperative Central Banks (DCCBs), and Regional Rural Banks (RRBs) and conducts statutory inspections of these banks.

7. (b)

Standing Committee on Statistics (SCoS):

- The Statistics Ministry recently stated that the **Standing Committee on Economic Statistics (SCES)** — which was tasked with examining economic indicators only — will now be **replaced by a Standing Committee on Statistics (SCoS)**. **Hence, statement 1 is correct.**
- **Chairman & members:**
 - **Pronab Sen**, India's first chief statistician and the **former chairman of the National Statistical Commission (NSC)**, has been named the chair of the new committee.
 - The SCoS — with **"enhanced terms of reference" vis-à-vis the SCES**, **"to ensure more coverage"** — has **10 official members**, and **four non-official members** who are eminent academics. **Hence, statement 2 is correct.**
 - The panel can have up to 16 members, as per the order issued by the **Ministry of Statistics and Programme Implementation (MoSPI)**.
- SCoS has a broader mandate to review the framework and results of all surveys conducted under the aegis of the **National Statistical Office (NSO)**. **Hence, statement 3 is incorrect.**

8. (c)

Statement 1 and 3 are correct: Export Preparedness Index 2022 report is a comprehensive tool which measures the **export preparedness of the States and UTs in India**.

- Exports are vital for simulating economic growth and development in a country, which necessitates understanding the factors which influence export performance.
- The EPI 2022 Report observed that most 'Coastal States' have performed well, with the states of **Tamil Nadu**, Maharashtra, Karnataka and Gujarat being the top-performers in the Export Preparedness Index across the country, in all categories of states.

Statement 2 is not correct: NITI Aayog released the Export Preparedness Index 2022 report in New Delhi.

9. (b)

Statement 1 is correct: The national MPI model retains the **ten indicators of the global MPI model**, staying closely aligned to the global methodology.

- It has three equally weighted **dimensions – Health, Education, and Standard of living** – which are represented by **12 indicators**.
- It also adds **two indicators**, viz., **Maternal Health and Bank Accounts** in line with national priorities.

Statement 2 is not correct: Reduction in Poverty: India has registered a **significant decline of 9.89 percentage points** in the number of India's multidimensionally poor from **24.85% in 2015-16 to 14.96% in 2019-2021**.

- **Decline in poverty in rural areas:** The rural areas witnessed the **fastest decline** in poverty from **32.59% to 19.28%**. During the same period, the **urban areas saw a reduction in poverty from 8.65% to 5.27%**.

Statement 3 is correct: Decline in poverty in states: The fastest reduction in the proportion of multidimensional poor was observed in the States of **Uttar Pradesh, Bihar, Madhya Pradesh, Odisha, and Rajasthan**.

- **Uttar Pradesh** registered the **largest decline** in the number of poor with 3.43 crore people escaping multidimensional poverty.

10. (a)

In News: Union Home Minister and Minister of Cooperation launched the **Central Registrar of Cooperative Societies (CRCS)-Sahara Refund Portal**.

Statements 1 and 2 are correct: Sahara Refund Portal has been developed for submission of claims by genuine depositors of Cooperative Societies of Sahara Group - Sahara Credit Cooperative Society Limited, Saharayn Universal Multipurpose Society Limited, Hamara India Credit Cooperative Society Limited and Stars Multipurpose Cooperative Society Limited.

- Necessary checks and balances have been incorporated in the Portal to ensure that only the legitimate deposits of the genuine depositors are refunded.
- The portal can also be **accessed through the Ministry of Cooperation website**.
- The depositors will be **verified through Aadhaar card to ensure their identity**.

Statement 3 is not correct: The purpose of the CRCS-Sahara Refund Portal is to protect the interests of members of the cooperatives. The portal will help address the genuine claims of depositors who had invested money in Sahara Group's cooperative societies.

- The money will be **deposited into the bank account of the claimants within 45 days**.

11. (a)

Statements 1 and 3 are incorrect: The academy was launched by ONDC in collaboration with NSE Academy Ltd, a subsidiary of the National Stock Exchange.

- It is a DPIIT (under the Ministry of Commerce and Industry) initiative to create a facilitative model to help small retailers take advantage of digital commerce.
- Any person without any knowledge of e-commerce can learn how to make a seller app with a technology service provider. **Hence, statement 2 is correct.**

12. (a)

Statement 1 is correct: The Prime Minister dedicated to the nation the **International Exhibition-cum-Convention Centre (IECC) complex** in New Delhi named '**Bharat Mandalam**'.

- The IECC project revamps the old and outdated facilities at Pragati Maidan and has been developed as a **National project**.

Statement 2 is not correct: The IECC complex has been developed as **India's largest MICE (Meetings, Incentives, Conferences, and Exhibitions) destination**.

- The newly developed IECC complex at Pragati Maidan comprises multiple state-of-the-art facilities including Convention Centre, Exhibition halls and amphitheatre etc.
- The main purpose of MICE events is to **create a networking platform** for business, industry, government, and academic communities and engage in meaningful conversations. Generally, they bring **large groups together for a specific purpose**.
- MICE is also known as the '**Meetings industry**' or '**Events industry**'. MICE tourism offers many other benefits to the economies such as **business opportunities, dissemination of knowledge and providing of training, skill upgradation etc.**
- The MICE sector also helps increase local government and private sector investments that result in the **up-gradation of the general hospitality environment of the destination country**.

13. (d)

The Central Consumer Protection Authority (CCPA) has been established to regulate matters related to the violation of the rights of consumers.

- Under the Consumer Protection Act (CPA), 2019, the authority was established to regulate **violations of consumer rights, unfair trade practices, and false or misleading advertisements** that are prejudicial to the interest of the public.
- The CCPA has authority under section 18 of the CPA, 2019 to protect, promote and most importantly enforce the rights of the consumers and prevent violation of their rights under the Act.
- It also seeks to ensure that no person engages in unfair trade practices.
- It is also empowered to issue guidelines to enforce the rights of the consumers laid down in the Act.

INDIAN POLITY & CONSTITUTION

1. Consider the followings statements:

1. Reservation for Scheduled Castes, Scheduled Tribes, and Other Backward Classes is referred to as vertical reservation.
2. Horizontal reservation is an intersectional approach that is provided within the vertical reservation category.

Which of the statements given above is/are correct?

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

2. Consider the following statements regarding the office of Directorate of Enforcement or the ED:

1. The administrative control of the ED is under the Department of Economic Affairs, Ministry of Finance.
2. It is mandated with investigation of economic crimes and violations of foreign exchange laws.
3. ED chiefs have fixed tenures of two years, which cannot be extended.

How many of the statements given above are correct?

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

3. With reference to the inclusion of communities in the Schedule Caste list, consider the following statements:

1. The Parliament by notification may specify the castes, races or tribes to be recognised as Scheduled Castes.
2. Any amendment in the list of Scheduled Castes can be made only by an order of the President under the Article 341 of Constitution.

Which of the statements given above is/are correct?

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

4. With reference to the Rule 377 of the Rules of Procedure and Conduct of Business in Lok Sabha, consider the following statements:

1. Individual matters or matters pertaining to local grievances can also be raised under the Adjournment Motion.
2. Members could raise discussion for a short duration without a formal motion or vote.
3. The Government is obliged to respond to the matters raised during the 'Zero Hour'.

How many statements given above are correct?

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

5. With reference to the Zero FIR which of the following statements is/are correct?
1. Zero FIR is defined in Indian Penal Code 1860.
 2. The provision of Zero FIR came up after the recommendation in the report of the Justice Verma Committee.
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
6. Consider the following statements:
1. The final decision of inclusion of any community in the Scheduled Tribe list rests with the President's office.
 2. The criteria presently followed for specification of a community as a Scheduled Tribe was set out by the KV Kamath Committee.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
7. With reference to the Central Board of Film Certification (CBFC) which of the following statements is/are correct?
1. It is an executive body tasked with regulating the public exhibition of films.
 2. CBFC is under the Ministry of Electronics and Information Technology.
- 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. 'Mo Jungle Jami Yojana' has been launched in which of the following states?
- (a) Madhya Pradesh (b) Odisha
(c) Jharkhand (d) Uttarakhand

EXPLANATIONS

1. (c)

The Maharashtra government stated that it would be difficult to provide “**additional reservations**” to transgender persons in education and public employment.

Statements 1 and 2 are correct: Vertical reservations are provisions aimed at addressing social asymmetry arising out of caste hierarchy, and in the case of OBCs, social and educational “backwardness”.

- These include reservations for **Scheduled Castes (SC), Scheduled Tribes (ST) and Other Backward Classes (OBC)**.
- Horizontal reservation, on the other hand, **cuts across all vertical groups to provide affirmative policies for disadvantaged groups within categories**.
- Horizontal reservation refers to the equal opportunity provided to other categories of beneficiaries such as women, veterans, the transgender community, and individuals with disabilities, cutting through the vertical categories.

2. (a)

The administrative control of the Directorate was **transferred** from the Department of Economic Affairs to the Department of Revenue, Ministry of Finance in 1960. **Hence, statement 1 is not correct.**

- The Directorate of Enforcement or the ED is a multi-disciplinary organization mandated with **investigation of economic crimes and violations of foreign exchange laws. Hence, statement 2 is correct.**
- ED chiefs have fixed **tenure of two years and 2021 amendments allow them a maximum of three annual extensions.** The amendments adds that the tenure of the Director may be extended by up to one year at a time, till the completion of five years from the initial appointment. **Hence, statement 3 is not correct.**

3. (d)

Both Statements are not correct.

- The **President** may with respect to any State or Union territory, and where it is a State after consultation with the Governor thereof, by **public notification**, specify the castes, races or tribes or parts of or groups within castes, races or tribes which shall for the purposes of this Constitution be deemed to be Scheduled Castes
- As any amendment in the list of Scheduled Castes can be made **only by an Act of Parliament**, in view of **clause (2) of Article 341 of Constitution of India.**

4. (a)

Statement 1 is not correct: Adjournment Motion: This motion is introduced to draw attention of the house towards a recent matter of urgent public importance.

- If admitted, it leads to **setting aside the normal business of the House** for discussing a definite matter of urgent public importance.
- While giving his consent to an Adjournment Motion, the Speaker is guided by the principles that the matter sought to be raised should be of **recent occurrence, definite, urgent and of sufficient public importance** to warrant interruption of the normal business of the House.
- **Individual matters or matters pertaining to local grievances cannot be raised** further, matters that are sub judice or do not involve direct or indirect responsibility of the Union Government cannot be raised under this device. It is also not permissible to raise a question of privilege by way of an Adjournment Motion.

Statement 2 is correct: Short Duration Discussion: Members could raise discussion for a short duration **without a formal motion or vote.**

- Any member desirous of raising a discussion on a matter of urgent public importance may **give notice in writing specifying clearly and precisely** the matter desired to be raised.
- The notice shall be required to be accompanied by an explanatory note stating **reasons for raising the discussion and supported by the signatures of at least two other members.**
- The discussion concludes with a reply from the Minister concerned.

Statement 3 is not correct: 'Zero Hour': The period of time immediately after the **Question Hour** is over and before the regular business as entered in the List of Business is taken up, is referred to as the 'Zero Hour'.

The Government is, however, **under no obligation** to respond to the matters raised during the 'Zero Hour'.

5. (b)

Recently Zero FIR was in news due to sexual violence in Manipur.

- When a police station receives a complaint regarding an alleged offense that has been committed in the jurisdiction of another police station, it registers an FIR and then transfers it to the relevant police station for further investigation. This is called a **Zero FIR**.
- Section 154 of Criminal code Procedure Act 1973, deals with the FIR (first information report). **Zero FIR** also falls under **section 154 of CrPC 1973**. Hence, **Station 1 is not correct**.
- **Statement 2 is correct:** The provision of Zero FIR came up after the recommendation in the report of the **Justice Verma Committee**, constituted after the 2012 Nirbhaya case.

6. (a)

In News: Parliament has passed the Constitution (Scheduled Tribes) Order (Fifth Amendment) Bill, 2022.

Statement 1 is correct: The inclusion of any community in the ST/SC list come into **effect only after the President assents** to a Bill that amends the Constitution (Scheduled Castes) Order, 1950 and the Constitution (Scheduled Tribes) Order, 1950, as is appropriate, after it is passed by both houses.

Statement 2 is not correct: The criteria presently (**set out by the Lokur Committee**) followed for specification of a community as a Scheduled Tribe are:

- indications of primitive traits,
- distinctive culture,
- geographical isolation,
- shyness of contact with the community at large, and
- backwardness. However, these criteria are not spelt out in the Constitution.

7. (d)

Neither 1 nor 2

Both the Statements are incorrect.

Union Information & Broadcasting Minister has raised concerns to the Central Board of Film Certification (CBFC) over their nod to the Hollywood film Oppenheimer.

CBFC is a **statutory body** tasked with regulating the public exhibition of films under the provisions of the **Cinematograph Act, 1952**.

- Films can be shown in India only after they have been certified by the Board.
- **Parent Ministry:** Ministry of Information and Broadcasting (I&B).

8. (b)

The Odisha government announced the **launch of Mo Jungle Jami Yojana i.e. state forest rights scheme** to strengthen forest rights among tribals and forest dwellers across the state's districts.

- If implemented, Odisha would become the **first in India to recognise community forest rights along with individual rights** offered by the Centre.
- The Mo Jungle Jami Yojana is aimed to function parallelly with **The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or FRA**. It is entirely funded by the state government.

GEOGRAPHY

1. Which of the following statements are correct regarding the Pangong Tso lake?
 - (a) It is the world's largest freshwater lake
 - (b) It is the world's highest saltwater lake.
 - (c) It is the world's deepest lake.
 - (d) It is the world's smallest lake.
2. Northern India is currently in the midst of an extremely wet phase of the monsoon due to extreme rain events. Which of the following are the reasons for this unusual rainfall?
 1. Warming of the Bay of Bengal
 2. Unequal warming of the Himalayas
 3. Lower atmospheric circulation
 4. Interaction between the monsoon winds and western disturbances

Choose the correct answer using the code given below:

(a) Only one	(b) Only two
(c) Only three	(d) All four
3. Consider the following mining regions of India:
 1. Salal Harimana region
 2. Barabil-Koira Valley
 3. Mandya region
 4. Nagaur in Rajasthan

How many of the above regions are major reserves of lithium in India?

(a) Only one	(b) Only two
(c) Only three	(d) All four
4. With reference to the Ghaggar-Hakra river, consider the following statements:
 1. It originates in Shivalik hills in the state of Uttarakhand.
 2. Kaushalya, Tangri and Markanda are its tributaries.

Which of the statements given above is/are correct?

(a) 1 only	(b) 2 only
(c) Both 1 and 2	(d) Neither 1 nor 2
5. The Kerch Bridge, recently seen in the news, is a crucial transportation link between which of the following regions?

(a) Russia and Crimea	(b) Indonesia and Malaysia
(c) Mexico and USA	(d) India and Myanmar

6. Which of the following statements regarding the Yamuna River system is **not** correct?
- It originates from the Yamunotri glacier in the Mussoorie range in Uttarakhand.
 - Yamuna is a lifeline to five States in India.
 - Chambal, Sindh, Betwa, Ken, Tons, Hindon are its tributaries.
 - Bisalpur Dam is one of the important dams on the river Yamuna.
7. Consider the following countries:
- | | |
|-------------|-----------|
| 1. Ecuador | 2. Brazil |
| 3. Paraguay | 4. Chile |
- How many of the above are sharing borders with Peru?
- Only one
 - Only two
 - Only three
 - All four
8. Which of the following given countries surround the Baltic Sea?
- | | |
|------------|-----------|
| 1. Poland | 2. Latvia |
| 3. Finland | 4. Norway |
- Select the correct answer from the options given above:
- 1 and 2 only
 - 1, 2 and 3 only
 - 2 and 3 only
 - 1, 2, 3 and 4

EXPLANATIONS

1. (b)

In News: India and China are building infra on the north bank of Pangong lake. **Pangong Lake** derives its name from the **Tibetan word, "Pangong Tso"**, which means "high grassland lake".

- It is one of the most famous lakes in Leh Ladakh.
- It is situated at a height of almost 4,350m and it is the **world's highest saltwater lake**.

2. (b)

Northern India is currently in the midst of an extremely wet phase of the monsoon. July rainfall in Himachal Pradesh, Haryana, Punjab, Rajasthan, Uttarakhand and Uttar Pradesh is substantially higher than normal.

Reasons for unusual rainfall

- Warming of Arabian Sea:** Excess rainfall over northwest India is consistent with the Arabian Sea having warmed by about 1.5 degrees Celsius since January. June contributes only about 15% of the rainfall to the seasonal total. The instabilities in the atmosphere that drive convection are not strong enough to drive large-scale rainfall during the pre-monsoon season. **Statement 1 is not correct.**
- Unequal warming of the Himalayas:** Some parts of the mountain chain are leading to rapid local warming. These irregular weather patterns during the monsoon superpose on these local features and result in cloudbursts, heavy rains and heat waves. **Statement 2 is correct.**
- Upper atmospheric circulation:** The strongest winds that occur in the upper atmosphere can spontaneously break into clockwise and anticlockwise patterns, especially when they run into mountainous terrain, such as the Himalaya. Strong clockwise winds, with air flowing out from the center, in the upper atmosphere demand an anticlockwise circulation near the surface, in order to feed the upper-level outflow. Such a convergence near the surface can drive excess rainfall. **Statement 3 is not correct.**

- **Interaction between the monsoon winds and western disturbances:** Rainfall in pre-monsoon was above normal due to a combination of the warm Arabian Sea and an unusually high number of western disturbances. As a result, soils were left moister than normal, which in turn affected the evolution of the monsoon. **Statement 4 is correct.**

3. (c)

Recently, the Geological Survey of India (GSI) found **lithium reserves** in the regions of **Salal Harimana in Jammu and Kashmir, Mandya district in Karnataka, and Nagaur district in Rajasthan**. However, **Barabil-Koira Valley is a region famous for iron mining in Kendujhar district of the state of Odisha**. It is India's richest hematite deposits.

4. (b)

About Ghaggar-Hakra River

- **Origin:** Dagshai Village, **Himachal Pradesh** in the Shivalik hills. It flows south through the states of Haryana and Rajasthan, eventually entering Pakistan where it dries out before reaching the Arabian Sea.
- **Tributaries:** Kaushalya, Tangri, Markanda, Beghna, Sarsuti, Chautang and Sukhna rivers.

5. (a)

The **Kerch Bridge/Crimea Bridge**, opened in 2018, is a crucial transportation route between **Russia and Crimea**.

- It is a crucial structure for Russia as it is the only direct link between the transport network of the country and the Crimean peninsula.
- The bridge's significance increased after the Russia-Ukraine war broke out. Russian convoys, carrying weapons, vehicles and fuel, frequently use the route to reach Ukrainian territories.

6. (d)

River 'Yamuna'

- **The river system:**
 - It is a major tributary of the river Ganges.
 - It **originates from the Yamunotri glacier** near Bandarpooch peaks in the Mussoorie range of the lower Himalayas in Uttarakhand. **Hence, Statement a is correct.**
 - It **meets the Ganges at the Sangam in Prayagraj**, Uttar Pradesh after flowing through Uttarakhand, Himachal Pradesh, Haryana and Delhi.
 - The river system includes **both water and land**. Yamuna is a **lifeline to five States**, and its floodplains are a charging point. **Hence, Statement b is correct.**
- **There are three stretches to the river:**
 - **Northern** (a 26-km run from Palla to Wazirabad barrage),
 - **Central** (22 km from the Wazirabad to Okhla barrage) and
 - **Southern** (4 km from the Okhla barrage till Jaitpur village, where it exits to Haryana).
- **Important Dams on the Yamuna:**
 - Lakhwar-Vyasi Dam (Uttarakhand),
 - Tajewala Barrage Dam (Haryana) etc.
- **Its tributaries:** Chambal, Sindh, Betwa, Ken, Tons, Hindon. **Hence, Statement c is correct.**

- **The life built on Yamuna floodplains:**

- A 2022 report found **there are 56 bastis** (one basti has 15 or more houses), with 9,350 households and 46,750 people.
- Almost half of the households (4,835) practice **farming as a livelihood**; others **rely on daily wage work, fishing, nurseries, and animal herding**.

Option (d) is not correct. Bisalpur Dam is built on river Banas.

7. (c)

Peru declared a state of emergency for sixty days in areas around the Ubinas volcano. Ubinas is in Moquegua, a region that lies 1,200 kilometers southeast of the capital city Lima and is the country's most active volcano.

Peru is located on the western side of South America.

It shares borders with five countries: Ecuador and Colombia to the north, **Brazil** to the east, Bolivia to the southeast, and **Chile** to the south. Its western border lies along the Pacific Ocean. It doesn't share borders with Paraguay.

8. (b)

In order to fight Climate Change, citizen divers restore seagrasses in the Baltic Sea.

About Baltic Sea:

- The Baltic Sea is the **youngest body of water on Earth**, having formed only 10,000–15,000 years ago when the ice sheets began to retreat.
- Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden are the nine nations that surround the Baltic Sea.



DEFENCE/ INTERNAL SECURITY

1. Consider the following statements with respect to the Cluster Munitions (CCM):
 1. It is a bomb that opens in the air and releases smaller “bomblets” across a wide area.
 2. They are precision weapons used for targeted killings.
 3. Use of cluster bombs itself does not violate international law, but using them against civilians can be a violation.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
2. Which one of the following is the context in which the term ‘Storm Shadow’ is mentioned?
 - (a) It is a nomenclature used to describe tropical cyclones.
 - (b) It is a type of anti-submarine warfare.
 - (c) It is a term used for a long range missile.
 - (d) It is a geophysical phenomenon found in higher latitudes.
3. With reference to the Section 144 of CrPC, consider the following statements:
 1. An order can remain in force for a period of 2 months only under the section.
 2. It is imposed only to prevent chaos and public movement in big groups.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
4. With reference to defence procurement in India, consider the following statements:
 1. The Defence Research and Development Organisation (DRDO) is responsible to give ‘in principle’ approval to Capital acquisitions in the Long Term Perspective Plan (LTPP).
 2. Defence Acquisition Council (DAC) is chaired by the Prime Minister.
 3. Project 75 aims to create a submarine fleet for the Indian Navy.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
5. With reference to Gujarat Prevention of Anti-Social Activities Act, consider the following statements:
 1. It originally came into force in 1985 for the preventive detention of operators of gambling dens, prostitution rackets, and offenders of cow-slaughter.
 2. The offender must have more than one FIR filed against him at any police station within the state.
 3. An officer can book any offender throughout the state irrespective of the territorial jurisdiction.How many statements given above are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None

6. With reference to Project-75 which of the following statements is/are correct?
1. It includes the indigenous construction of six diesel electric attack submarines of Scorpene class.
 2. The fifth submarine INS Vagsheer was commissioned recently.
- 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. India conducts Exercise Nomadic Elephant with which of the following countries?
- (a) Nepal (b) Singapore
(c) Mongolia (d) Russia
8. Consider the following countries:
1. China
 2. USA
 3. South Korea
 4. Russia
- How many of the above countries have developed their own technology of solid fuel in missile systems?
- (a) Only one (b) Only two
(c) Only three (d) All four
9. C-295, recently seen in the news is related to which of the following:
- (a) An exoplanet (b) An Unmanned Aerial Vehicle (UAV)
(c) A guided ballistic missile (d) A tactical transport aircraft
10. With reference to the Indian Coast Guard (ICG), which of the following statements is/are correct?
1. It was established by the Coast Guard Act, 1978 of the Parliament of India.
 2. The Ministry of Home Affairs is the parent agency of ICG.
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
11. Consider the following statements:
1. In the Tehseen Poonawala case, the Supreme Court addressed the issue of lynchings and mob violence in India.
 2. The apex court has directed States to form Special Task Forces to collect intelligence on likely incidents of hate speeches, mob violence and lynchings.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
12. Consider the following statements regarding imposition of Internet shutdowns in India:
1. Internet shutdowns are imposed under the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2021
 2. Nobody below the level of a Joint Secretary can impose the shutdown.
- 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 correct: According to the 2008 Convention on Cluster Munitions, a cluster munition means a “conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions”.

In other words, it is a bomb that opens in the air and releases smaller “bomblets” across a wide area.

Statement 2 is not correct: Essentially, cluster munitions are **non-precision weapons** that are designed to injure or kill human beings indiscriminately over a large area, and to destroy vehicles and infrastructure such as runways, railway or power transmission lines.

They can be dropped from an aircraft or launched in a projectile that spins in flight, scattering many bomblets as it travels.

Statement 3 is correct: Use of cluster bombs itself does not violate international law, but using them against civilians can be a violation.

Countries that have ratified the Convention on Cluster Munitions are prohibited from using cluster bombs.

2. (c)

France will join Britain in supplying **long-range SCALP missiles to Ukraine**.

What are SCALP Missiles?

- It is an **air-launched British-French missile** known to UK forces as the “**Storm Shadow**”, manufactured by MBDA and used by **France, Italy and the United Kingdom**.
- It is a **fire and forget missile**, programmed before launch. Once launched, the missile cannot be controlled, its target information changed or self-destructed.
- The missile follows a path **semi-autonomously**, on a low flight path guided by **GPS and terrain matching** to the area of the target.
- The missile uses inertial navigation, GPS and terrain referencing to chart a **low-altitude course to its target to avoid detection**.

3. (d)

Both statements 1 and 2 are not correct: Section 144 Provisions

The magistrate can direct any person to abstain from a certain act or to take a certain order with respect to **certain property in his possession or under his management**.

- This usually includes restrictions on movement, carrying arms and from assembling unlawfully.
- It is generally believed that **assembly of three or more people** is prohibited under Section 144.
- **For a single individual:** It can be used to restrict even a single individual. Such an order is passed when the magistrate considers that it is likely to prevent, or tends to prevent, obstruction, annoyance or injury to any person.
- **Time frame:** No order passed under Section 144 can remain in force for **more than two months** from the date of the order, unless the state government considers it necessary. Even then, the **total period cannot extend to more than six months**.
- **There is no hard and fast rule about the situations in which the section can be invoked.**
- The section has been imposed in a variety of situations, from the installation of CCTV cameras to the prohibition of using a certain kind of manjha while flying kites.

4. (a)

- Defence Acquisition Council (DAC) is responsible to give 'in principle' approval to Capital acquisitions in the Long Term Perspective Plan (LTPP). **So, Statement 1 is not correct.**
- Defence Acquisition Council (DAC) chaired by the **Defence Minister** gives 'in principle' acceptance of necessity(AON) to each Capital acquisition project in the defence sector. **So, Statement 2 is not correct.**
- Project 75** aims to create a **submarine fleet for the Indian Navy**, a plan to build six submarines by the mid-2030s. **So, Statement 3 is correct.**

5. (a)

Statement 1 is not correct: The Gujarat Prevention of Anti-Social Activities Act, 1985, provides for **preventive detention** of boot-leggers, dangerous persons, drug offenders, immoral traffic offenders, and property grabbers for preventing their **anti-social and dangerous activities** prejudicial to the maintenance of public order.

- It was first published in the **Gujarat Government Gazette in 1985**, and came into force in **1985**.
- In 2020, amendments to the Act** brought under its ambit operators of gambling dens and prostitution rackets, offenders of cow-slaughter, sexual offences and cyber crimes, those involved in usury, and repeated offenders of the Arms Act.

Statement 2 is correct: As per the **Section 3 of the Act**, the state government with a view to preventing a person from acting in any manner prejudicial to public order, make an order directing that such a person be detained.

- The person can be detained **anywhere** in Gujarat, and be removed from one place of detention to another within the state.
- The offender **must** have **more than one FIR** filed against him at any police station within the state.

Statement 3 not correct: The offender can be booked under PASA **only by an officer whose territorial jurisdiction he resides in.**

6. (a)

- Project 75 includes the indigenous construction of **six diesel electric** attack submarines of Scorpene class. **Hence, statement 1 is correct.**
- The submarines are being constructed by the **Mazagon Dock Shipbuilders Limited (MDL)**, Mumbai in collaboration with the French M/s Naval Group.
- Under the project **INS Kalvari, INS Khanderi, INS Karanj** and **INS Vela** were commissioned between 2017 and 2021.
- The fifth submarine, **INS Vagir**, was commissioned recently.
- The sixth submarine **Vagsheer** has begun its sea trials. **Hence, statement 2 is not correct.**

7. (c)

An Indian Army contingent reached Ulaanbaatar to take part in the exercise, 'Nomadic Elephant-23'.

- It is an annual training event between India and Mongolia, which is conducted alternatively in the two countries.
- The last edition was held at Special Forces Training School, Bakloh in October 2019.
- The aim of this exercise is to build positive military relations, exchange best practices, develop interoperability, bonhomie, camaraderie and friendship between the two armies.

8. (d)

Solid fuel in missile systems: Solid propellants are a mixture of fuel and oxidiser.

- Metallic powders such as **aluminium** often serve as the fuel, and **ammonium perchlorate** is the **most common oxidizer**.
- When solid propellant burns, oxygen from the ammonium perchlorate combines with aluminium to generate enormous amounts of energy and temperature of more than 5,000 °F (2,760 °C), **creating thrust and lifting the missile**.
- Solid fuel dates back to fireworks **developed by the Chinese centuries ago**, but made dramatic progress in the mid-20th century, when the **USA developed more powerful propellants**.
- The **Soviet Union fielded its first solid-fuel ICBM** in the early 1970s, followed by **France's development of its S3, also known as SSBS**, a medium-range ballistic missile.
- **China** started testing solid-fuel ICBMs in the late 1990s.
- **South Korea** had already secured **"efficient and advanced"** solid-propellant ballistic missile technology.

9. (d)

The Airbus C-295 is a new-generation tactical transport aircraft.

- It conducts multi-role operations worldwide under all weather conditions.
- It is equipped with winglets and is capable of transporting more payload over larger distances in the hot and high conditions.

10. (a)

DG Rakesh Pal has been appointed as the 25th Director General of the Indian Coast Guard (ICG).

- The Indian Coast Guard is a maritime law enforcement and search and rescue agency of India with jurisdiction over its territorial waters including its contiguous zone and exclusive economic zone.
- It was formally established in **1977** by the **Coast Guard Act, 1978** of the Parliament of India. **Hence, statement 1 is correct.**
- **Statement 2 is not correct: Parent Agency:** Ministry of Defence

Headquarters: New Delhi

11. (c)

Tehseen Poonawala case

Creeping threats of mob violence:

The 2018 judgment of the apex court in Tehseen Poonawala case had foretold that **lynchings and mob violence were "creeping threats"** and need to be nipped in the bud. **Hence statement 1 is correct.**

Apex Court's directions:

- The judgment had directed States to **form Special Task Forces** to collect intelligence on likely incidents of hate speeches, mob violence and lynchings in districts. **Hence statement 2 is correct.**
- The judgment had made it clearly **the duty of the Central and State governments** to take steps to curb and stop the dissemination of explosive messages, videos, etc, which have a "tendency to incite mob violence and lynching of any kind".
- The 2018 judgment had directed that the **police were duty bound** to register FIRs, arrest the accused, carry out effective investigation and file charge sheets in complaints of mob violence and lynchings.

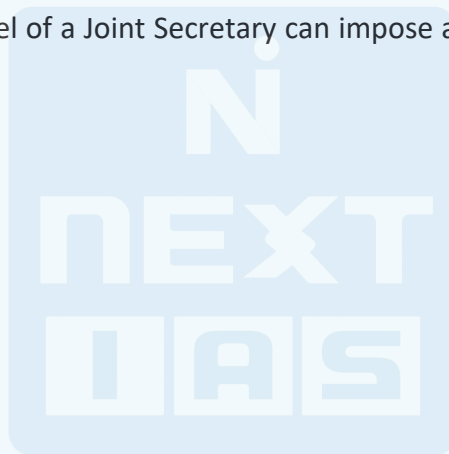
12. (b)

Internet shutdowns in India:

Over the past few years, the Indian government has increasingly been trying to control law and order by shutting down access to the Internet.

Legal Provisions:

- **Section 144 of CrPC:**
 - Till the year 2017, shutdowns were imposed largely under Section 144 of the Code of Criminal Procedure (CrPC).
 - Section 144 of CrPC gave the police and the District Magistrate the powers in order to prevent unlawful gathering of people and also to direct any person to abstain from a certain activity.
- **Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017:**
 - In 2017 the law was amended and the Government promulgated the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rule 2017.
 - The substantive law regarding suspension of Internet services is a broad interpretation of **Section 5(2) of Telegraph Act 1855**, although the traditional law regarding the same was not a lump of the former Act or Rules. **Hence statement 1 is incorrect.**
- **Imposing authority:**
 - Nobody below the level of a Joint Secretary can impose a shutdown. **Hence statement 2 is correct.**



INTERNATIONAL RELATIONS

1. With reference to the Colombo Security Conclave (CSC), consider the following statements:
1. It is a security-focused group operating in the Indian Ocean region.
 2. It comprises of India, Sri Lanka, Maldives, and Bangladesh as permanent members.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
2. Consider the following countries:
1. Iran
 2. Israel
 3. Pakistan
 4. Tajikistan
- Which of the above countries are members of Shanghai Cooperation Organisation (SCO)?
- (a) 1 and 2 only (b) 2, 3 and 4 only
(c) 1, 3 and 4 only (d) 1, 2, 3 and 4
3. Consider the following statements:
1. The High seas are areas of oceans that lie beyond a country's Exclusive Economic Zone.
 2. High seas comprise more than 60 percent of the world's oceans and nearly half the planet's surface.
- Which of the statements given above is/are correct?
- (a) 1 Only (b) 2 Only
(c) Both 1 and 2 (d) Neither 1 nor 2
4. With reference to the 2023 Global Peace Index (GPI) consider the following statements:
1. It is released by the The United Nations Educational, Scientific and Cultural Organization (UNESCO).
 2. Societal safety and security is among one of the domains to measure the state of peace.
 3. The global economic impact of violence increased by 17% equivalent to 13% of global GDP.
- How many statements given above is/are correct?
- (a) Only one (b) Only two
(c) All three (d) None
5. With reference to Muslim World League, which of the following statements is/are correct?
1. It is an international NGO with members from all Islamic countries and sects, and was founded in 1978.
 2. It is headquartered in Mecca, Saudi Arabia.
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

6. Which of the following statements is **not correct** regarding the 'Bastille Day military parade that was recently in the news?
- (a) It is also known as the 14 July military parade.
 - (b) It is a German military parade symbolizing the fall of the Berlin Wall.
 - (c) Prime Minister Narendra Modi is the Guest of Honour at the 2023 Bastille Day.
 - (d) India's tri-services contingent did march past on the 2023 Bastille Day.
7. Which among the following group of countries are part of the Indo – Pacific Economic Framework for Prosperity (IPEF)?
- (a) Vietnam, India, Malaysia and Myanmar
 - (b) New Zealand, Philippines, India and Thailand
 - (c) Thailand, Japan, Myanmar and Vietnam
 - (d) China, India, Vietnam and Thailand
8. Consider the following statements with reference to The North Atlantic Treaty Organization (NATO):
- 1. NATO is a military alliance of countries from Europe and North America.
 - 2. Sweden became NATO's newest member in April 2023.
 - 3. Every NATO country contributes to the costs of running the Alliance based on a cost-share formula derived from Gross National Income.
- 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
9. Consider the following statements regarding Henley Passport Index 2023:
- 1. India has climbed seven places on Henley Passport Index 2023 to 80th rank from 87 last year.
 - 2. Singapore has the most powerful passport in the world.
 - 3. The index is released by the University of Cambridge along with Henley and Partners.
- Which of the statements given above is/are correct?
- (a) 1 only
 - (b) 1 and 2 only
 - (c) 2 only
 - (d) 2 and 3 only
10. Which of the following are the issues for disagreement between India & Sri Lanka?
- 1. Ownership of Katchatheevu Island
 - 2. Ownership of South Talpatti Island
 - 3. The use of mechanised bottom trawlers by Indian fishermen
- Select the correct answer using the code given below:
- (a) 1 only
 - (b) 2 only
 - (c) 1 and 3 only
 - (d) 3 only
11. With reference to the International Seabed Authority (ISA) which of the following statements is/are correct?
- 1. It is an international organization established in 1994 under the United Nations Convention on the Law of the Sea (UNCLOS).
 - 2. The headquarter of the ISA is located in the USA.

Select the correct answer using the code given below:

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

12. India recently established a 'Disaster Risk Reduction Working Group' at which of the following global platforms?
- (a) Asian Ministerial Conference on Disaster Risk Reduction
(b) Group of 20 (G20)
(c) UN World Conference on Disaster Risk Reduction
(d) 5th World Congress on Disaster Management
13. Which of the following statements is **not correct** regarding the Shanghai Cooperation Organisation (SCO)?
- (a) 'Shanghai Five' was renamed to form the SCO.
(b) The 23rd Meeting of SCO's Council of Heads of State granted Iran full SCO membership.
(c) In 2023, leaders of the SCO member-states signed the New Delhi Declaration.
(d) None of the above
14. With reference to the Free Movement Regime (FMR) along the India-Myanmar border, which of the following statements is/are correct?
1. It allows tribes living along the border on either side of two countries to travel up to 16 km inside the other country without a visa.
 2. The FMR was implemented in 2018 as part of the Act East Policy.

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. India & Australia are part of/share which of the following multilateral institutions?
1. Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)
 2. Group of 20 (G20)
 3. The Quadrilateral Framework (QUAD)
 4. South Asian Association for Regional Cooperation (SAARC)

Select the correct answer using the code given below:

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

EXPLANATIONS

1. (a)

Statement 1 is correct:

Colombo Security Conclave (CSC)

- **Secretariat:** Colombo, Sri Lanka.
- **Governance:** It is held at the National Security Advisor (NSA)-level.
- **Objective:** It is a security-focused group operating in the Indian Ocean region.
- **Members:** The CSC comprises **India, Sri Lanka, Maldives, and Mauritius** as permanent members. Bangladesh and Seychelles are observers. Hence, **Statement 2 is not correct**

- **Mandate:** In March 2022, the group adopted an agenda of five pillars:
 - maritime safety and security;
 - countering terrorism and radicalisation;
 - combating trafficking and transnational organised crime;
 - cybersecurity and protection of critical infrastructure and technology; and
 - humanitarian assistance and disaster relief.

2. (c)

Prime Minister Narendra Modi addressed the 23rd Summit of the SCO Council of Heads of State.

Shanghai Cooperation Organisation (SCO) is a **permanent intergovernmental international organisation**.

- Founded in June 2001.
- It was built on the '**Shanghai Five**', the grouping which consisted of Russia, China, Kazakhstan, Kyrgyzstan and Tajikistan.
 - They came together in the post-Soviet era in 1996, in order to work on regional security, reduction of border troops and terrorism.
- The SCO grouping now comprises China, India, **Iran**, Kazakhstan, Kyrgyzstan, **Pakistan**, Russia, **Tajikistan** and Uzbekistan.
 - India acquired the observer status in the grouping in 2005 and was admitted as a full member in 2017.

3. (c)

In News: Recently, the UN adopted the Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) or the High Seas Treaty.

Statement 1 is correct: According to the 1958 Geneva Convention on the High Seas, parts of the sea that are not included in the territorial waters or the internal waters of a country are known as the high seas

- High sea is the area beyond a country's **Exclusive Economic Zone** which extends up to 200 nautical miles from the coastline
- These are the largest habitats on Earth and are home to millions of species.

Statement 2 is correct: The high seas account for more than **60% of the world's ocean** area and cover about **half of the Earth's surface**, which makes them a hub of marine life.

- They are home to around 2.7 lakh known species, many of which are yet to be discovered.
- The high seas are fundamental to human survival and well-being.

4. (b)

In News: The 2023 Global Peace Index (GPI) has released its annual ranking of the most peaceful countries in the world.

Statement 1 is not correct: This is the **17th edition** of the Global Peace Index (GPI), which ranks **163 independent states and territories** according to their level of peacefulness.

It is produced by the **Institute for Economics and Peace (IEP)** and it is the world's leading measure of global peacefulness.

Statement 2 and 3 are correct: The GPI covers 163 countries comprising 99.7 percent of the world's population, using **23 qualitative and quantitative indicators** from highly respected sources. It measures the state of peace across **three domains**:

- **Societal safety and security**

- Ongoing domestic and international conflict
- Militarisation
- **Economic impact of violence:** The global economic impact of violence increased by 17% or \$1 trillion, to \$17.5 trillion in 2022, equivalent to **13% of global GDP**.
 - A Chinese blockade of Taiwan would cause a drop in global economic output of \$2.7 trillion, almost double the loss that occurred due to the 2008 global financial crisis.

5. (b)

Statement 1 is not correct: The Muslim World League (MWL) is an international NGO with members from all Islamic countries and sects.

- **Founded:** It was founded in accordance with a resolution adopted during the meeting of the General Islamic Conference which was held in **Makkah in 1962**
- **Headquarters:** Mecca, Saudi Arabia. **Hence, Statement 2 is correct.**
- It aims to present Islam and its tolerant principles, provide humanitarian aid, extend bridges of dialogue and cooperation with all.
- To engage in positive openness to all cultures and civilisations, follow the path of centrism and moderation.

6. (b)

The Bastille Day military parade

About: The Bastille Day military parade, also known as the **14 July military parade**. **Hence option (a) is correct.**

- It is a French military parade that has been held on the morning of 14 July each year in Paris since 1880, almost without exception.
- It is a **popular event in France**, it is also one of the **oldest regular military parades** in the world.

Significance of the day:

- July 14 is more popularly associated with the **storming of the Bastille in 1789**, it is also the **anniversary of Fête de la Fédération**, an event held in 1790 to celebrate the unity of the French people. **Hence option (b) is incorrect.**
- Also, while Bastille Day is often seen as the **symbol of the end of monarchy**, kings and queens continued in France till long after that.

India's participation in the 2023 parade:

- Prime Minister Narendra Modi is the **Guest of Honour** at **France's Bastille Day parade** in Paris. **Hence option (c) is correct.**
- The visit coincides with 25 years of the oldest among India's almost 30 strategic partnerships around the world.
- As the tri-services contingent marches down the Champs-Élysées, **three French Rafale fighter aircraft** recently inducted into the Indian Air Force performed a flypast. **Hence option (d) is correct.**

7. (b)

Indo – Pacific Economic Framework for Prosperity (IPEF):

- It was launched in 2022 in Tokyo, with 14 partner countries including Australia, Brunei, Fiji, **India**, Indonesia, Japan, Republic of Korea, Malaysia, **New Zealand**, **Philippines**, **Singapore**, **Thailand**, **Vietnam** and the **USA**.

- This framework will advance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness among economies.
- It aims to contribute to cooperation, stability, prosperity, development, and peace within the region.

8. (c)

In News: The NATO summit in the Lithuanian capital of Vilnius has been concluded.

Statements 1 and 3 are correct: The North Atlantic Treaty Organization (NATO): It was founded in 1949 and is a group of 31 countries from **Europe and North America** that exists to protect the people and territory of its members. It is founded on the principle of collective defence, meaning that if one NATO Ally is attacked, then all NATO Allies are attacked. Every NATO country contributes to the costs of running the Alliance, based on a **cost-share formula derived from Gross National Income**. This covers the costs of NATO's operations and missions, facilities, Command Structure and jointly-owned equipment, like its surveillance drones.

Statement 2 is not correct: Finland became NATO's newest member (4 April 2023), upon depositing its instrument of accession to the North Atlantic Treaty with the United States at NATO Headquarters in Brussels.

9. (b)

Global performers:

- India has climbed seven places on **Henley Passport Index 2023** to **80th rank from 87** last year. **Hence, statement 1 is correct.**
- **Singapore** is now officially the most powerful passport in the world. **Hence, statement 2 is correct.**
- **Japan**, which occupied the top position on the Henley Passport Index **for five years, dropped** to the **third** place.
- **Germany, Italy, and Spain** occupy the second place.

Henley Passport Index

- The Henley Passport Index is the **ranking of all the world's passports** according to the number of destinations their holders can access without a prior visa.
- The index includes **199 different passports** and **227 different travel destinations**.
- The Index is brought out by **Henley and Partners**. **Hence, statement 3 is not correct.**

10. (c)

Major issues with Sri Lanka

Issue of Katchatheevu: Hence option 1 is correct.

- The ownership of Katchatheevu Island, where Tamil fishermen had traditional fishing rights for centuries, remains an unresolved issue.
- **In 1974, the island was ceded to Sri Lanka** after an agreement was signed by Indira Gandhi between the two countries without consulting the Tamil Nadu government.
- The **agreement allowed Indian fishermen "access to Katchatheevu for rest, for drying of nests and for the annual St Anthony's festival"** but **it did not ensure the traditional fishing rights**.

Proliferation of trawlers in Indian coast: Hence option 3 is correct.

- Trawlers are mechanised boats with highly exploitative fishing nets unlike most of the poor fishermen on the Sri Lankan coast who use traditional fishing methods.
- The use of mechanised bottom trawlers has become a bone of contention between the fishermen of the two countries.

- The actions of the Tamil Nadu fishermen adversely affect their counterparts in the Northern Province who are also struggling to come to terms with life after the civil war.

Option 2 is not correct:

- **New Moore, also known as South Talpatti and Purbasha Island**, is a small uninhabited offshore sandbar island in the Bay of Bengal, off the coast of the Ganges-Brahmaputra delta region.

11. (a)

In News: The ISA member nations agreed on a two-year road map for the **adoption of deep-sea mining regulations** in pursuance of efforts to enact a code for the exploitation of nickel, cobalt and copper in **deep seabed areas outside national jurisdictions**.

Statement 1 is correct: It is an international organization established in 1994 **to regulate mining and related activities in the international seabed** beyond national jurisdiction.

- The ISA was established under the **United Nations Convention on the Law of the Sea**, which codified international law regarding territorial waters, sea-lanes, and ocean resources.
- **Headquarters:** Kingston, Jamaica. **Hence, Statement 2 is not correct.**

12. (b)

India's initiative at G20 - Disaster Risk Reduction Working Group:

- India has established the first G20 Disaster Risk Reduction Working Group.
- Countries that make up the G20 hold around 85% of the global GDP and about two-thirds of the world population.
- And as human vulnerability to disasters is strongly linked to economic decisions, the G20 is in a unique position to chart a new path of disaster risk-informed decision-making.

13. (d)

Shanghai Cooperation Organization (SCO):

- It is a **permanent intergovernmental** international organisation of **Eurasian Nations** with a **secretariat in Beijing**.
- It is a political, economic and military organisation that aims at maintaining peace, security and stability in the region.

Origin: Journey from Shanghai Five to SCO

- Shanghai Five emerged in 1996 from a series of border demarcation and demilitarization talks between 4 former USSR republics and China.
- **Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan** were members of the Shanghai Five.
- With the accession of **Uzbekistan** to the group in 2001, the Shanghai Five was renamed the SCO.
- The SCO Charter was signed in 2002 and entered into force in 2003. **Hence statement (a) is correct.**
- Highlights of the 23rd Meeting of SCO's Council of Heads of State
- Leaders of the SCO member-states signed the **New Delhi Declaration**. **Hence statement (c) is correct.**
- They issued statements **on countering radicalisation** and exploring cooperation in **digital transformation**.
- It also adopted the SCO's economic development strategy for the period until 2030.

Iran and Belarus:

- The summit **granted Iran full SCO membership**. **Hence statement (b) is correct.**

- The **memorandum of obligations was signed for Belarus** to join the SCO as a member-state.

14. (c)

Both the Statements are correct.

The border between India and Myanmar runs for **over 1,600 km in the four states of Mizoram, Manipur, Nagaland, and Arunachal Pradesh.**

The FMR is a **mutually agreed arrangement between the two countries** that allows tribes living along the border on either side to travel up to **16 km inside the other country without a visa.**

The FMR was implemented in **2018** as part of the Central government **Act East Policy.**

Significance of FMR

- **People-to-people contact:** FMR facilitates people-to-people contact.
- **Impetus to local trade and business:** The region has a long history of trans-border trade through customs and border haats. Given the low-income economy of the region, such exchanges are vital for the sustenance of local livelihoods.

15. (b)

India-Australia Relations

- Australia looks at India as an important partner in promoting regional security and stability.
- **Bilateral Engagement:**
 - Bilateral mechanisms include **high-level visits**, Annual Meetings of Prime Ministers, Foreign Ministers' Framework Dialogue, Joint Trade and Commerce Ministerial Commission, **India-Australia '2+2' Foreign Secretaries and Defence Secretaries Dialogue**, Defence Policy Talks, Australia-India Education Council, Defence Services Staff Talks, etc.
- **Multilateral Engagement:**
 - Both countries have close cooperation in multilateral fora like **Food and Agriculture Organization (FAO)** and **G20**.
 - **The Quadrilateral Framework (QUAD) of India and Australia** along with the US and Japan emphasize the collective resolve to maintain a free, open and inclusive Indo-Pacific region. **Hence options 2 and 3 are correct.**
- **BIMSTEC:**
 - 7 countries are members of Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). The member countries are India, Bhutan, Bangladesh, Myanmar, Thailand, Nepal, Sri Lanka.
 - **Hence option 1 is incorrect.**
- **SAARC:**
 - South Asian Association for Regional Cooperation (SAARC) has eight member countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri-Lanka).
 - **Hence option 4 is incorrect.**

SCIENCE & TECHNOLOGY

1. The term 'Dark Pattern' is often seen in the news, it is related to which of the following?
(a) Dark Matter (b) Terrorism
(c) Online Advertising (d) Organ Trafficking
2. With reference to the Dr. A.P.J. Abdul Kalam Knowledge Centre and Space Museum, consider the following statements:
 1. The project is jointly promoted by the State government of Tamil Nadu and the Vikram Sarabhai Space Centre (VSSC).
 2. The project is planned at the birth place of Dr. A.P.J. Abdul Kalam.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 Osmosis, consider the following statements:
 1. It is the movement of molecules of solvent from a region of its higher concentration to a region of its lower concentration.
 2. It is observed in living cells and tissues of all organisms.Which of the statements given above is/are correct?
(a) 1 Only (b) 2 Only
(c) Both 1 and 2 (d) Neither 1 nor 2
4. With reference to Lagrange Point, consider the following statements:
 1. It is a location in space where the combined gravitational forces of two large bodies equal the centrifugal force felt by a much smaller third body.
 2. Objects placed at these positions are relatively stable and require minimal external energy.Which of the statements given above is/are correct?
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
5. With reference to Digital Personal Data Protection (DPDP) Bill 2022, consider the following statements:
 1. Data fiduciary means the personal data where an individual is a child and it includes the parents or lawful guardian of such a child.
 2. Bill allows global data flows by default to all jurisdictions other than a specified 'negative list' of countries.Which of the statements given above are correct?
(a) 1 Only (b) 2 Only
(c) Both 1 and 2 (d) Neither 1 nor 2

6. What is Threads which was recently seen in the news?
- Government of India's initiative for the handloom industry.
 - A kind of dark pattern in online advertising.
 - A social media App launched by Meta.
 - A new initiative by the Central Bureau of Investigation (CBI).
7. With reference to the Majorana zero mode, consider the following statements:
- It is an elusive kind of particle that could potentially revolutionize quantum computing.
 - Majorana zero modes protect the information by the topological degeneracy.
 - It is composed of two entities, an electron and hole.
- How many statements given above are correct?
- Only one
 - Only two
 - All three
 - None
8. With reference to the Chandrayaan 3, consider the following statements:
- The mission aims to make a soft landing and explore the south pole of the Moon.
 - It will be launched from rocket GSLV MkIII-M1.
- Which of the statements given above is/are correct?
- Only 1
 - Only 2
 - Both 1 and 2
 - Neither 1 nor 2
9. With reference to Synthetic Biology, consider the following statements:
- It is a field of science that involves redesigning organisms for useful purposes.
 - The modified genome of a free-living organism called *Mycoplasma mycoides* was named JCVI-syn1.0.
 - It is applied into yeast to produce rose oil as an eco-friendly substitute for real roses to make luxury scents.
- How many statements given above are correct?
- Only one
 - Only two
 - All three
 - None
10. With reference to cloud storage, consider the following statements:
- It is a method through which digital data is stored on servers in off-site locations.
 - The onus of ensuring data security lies with the Government authorities.
 - These servers can be accessed either by the public or through private internet connections.
- How many statements given above are correct?
- Only one
 - Only two
 - All three
 - None
11. Consider the following statements, with reference to the Section 69 (A) of the IT Act:
- It allows the government to issue content-blocking orders to online intermediaries.
 - Government can issue orders for blocking any content on the internet.
 - Only the Union government can issue such orders.

How many statements given above are correct?

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

12. Consider the following statements:

1. Fluorine is a highly reactive element used to make fluorochemicals.
2. Hydrogen Fluoride (HF) is an extremely poisonous and corrosive liquid.

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

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

13. PM-WANI that was recently in news is related to which of the following?

- (a) Creation of millions of interoperable wi-fi hotspots
(b) Provide citizens ease of access to government portals.
(c) Bill payment services
(d) Digitization of the process of securing the life certificate for Pensioners.

EXPLANATIONS

1. (c)

In News: The **Union Consumer Affairs Ministry** has decided to issue **specific guidelines** to control **dark patterns** in online advertisements.

What are Dark Patterns?

- The term '**dark patterns**' was coined by **Harry Brignull in 2010**, it simply means a user interface that has been crafted **to trick or manipulate users** into making **choices that are detrimental to their interest**.
- Dark patterns encompass a wide range of **manipulative practices** such as drip pricing, disguised advertising, bait and click, choice manipulation, false urgency and privacy concerns.

2. (d)

Both Statement 1 and 2 are not correct:

Dr. A.P.J. Abdul Kalam Knowledge Centre and Space Museum:

The project is jointly promoted by the **State government of Kerala and the Vikram Sarabhai Space Centre (VSSC)**.

- Thiruvananthapuram is where Dr. Kalam spent his **initial years** with the Indian space programme. As such, the **project is a fitting tribute to him**.
- The project, planned on 1.3 acres close to the Kowdiar Palace, was originally conceived in 2016, but was delayed on account of the **heritage committee** objecting to the initial design.
- The knowledge centre and museum is designed to **benefit the younger generation**.

3. (c)

Statements 1 and 2 are correct: Osmosis is the term used to refer specifically to the diffusion of water across a differentially- or semi-permeable membrane.

- It is a common physical process **observed in living cells and tissues of all organisms**.
- It occurs spontaneously in response to a driving force and the net direction and rate of osmosis depends on both the pressure gradient and concentration gradient.

- It is defined as the movement of molecules of solvent from a region of its **higher concentration to a region of its lower concentration across a selectively** permeable membrane, such as the plasma membrane.

Water will move from its region of **higher chemical potential (or concentration)** to its region of **lower chemical potential until equilibrium is reached**.

4. (c)

Both Statement 1 and 2 correct:

Lagrange Point:

- It is named after Italian-French mathematician **Joseph-Louis Lagrange**.
- A Lagrange point is a location in space where the combined gravitational forces of two large bodies, such as Earth and the sun or Earth and the moon, equal the centrifugal force felt by a much smaller third body. The interaction of the forces creates a **point of equilibrium**.
- Objects placed at these positions are relatively stable and require minimal external energy or fuel to keep themselves there, and so many instruments are positioned here.

5. (b)

In News: The Union Cabinet cleared the **Digital Personal Data Protection (DPDP) Bill 2022**, paving the way for it to be introduced in Parliament.

Statement 1 is not correct: Definitions under Bill

- **Data** means a representation of information, facts, concepts, opinions or instructions in a manner suitable for communication, interpretation or processing by humans or by automated means.
- **Data Fiduciary** means any person who alone or in conjunction with other persons determines the purpose and means of processing of personal data.
- **Data Principal** means the individual to whom the personal data relates and where such individual is a child includes the parents or lawful guardian of such a child.

Statement 2 is correct: High penalties: Companies dealing in personal data of consumers that fail to take reasonable safeguards to prevent data breaches could end up facing penalties. Penalty of up to ₹250 crore could be levied for each instance of breach with an upward revision of ₹500 crore. Fines for individual offenses would begin from ₹10,000.

- **Global Data flow mechanism:** It deals with cross-border data flows to international jurisdictions — moving from a 'whitelisting' approach to a '**blacklisting**' mechanism. Hence the Bill allows global data flows by default to all jurisdictions other than a specified 'negative list' of countries.

6. (c)

Meta has unveiled an **app called Threads** to rival Twitter, targeting users looking for an alternative to the social media platform owned — and frequently changed — by Elon Musk.

- **Features:** On Threads, there are buttons to like, repost, reply to or quote a thread, and users see the number of likes and replies that a post has received.
 - Posts are limited to 500 characters, which is more than Twitter's 280-character threshold, and can include links, photos and videos up to five minutes long.
 - Instagram users will be able to log in with their existing usernames and follow the same accounts on the new app. New users will have to set up an Instagram account.

7. (c)

In News: Microsoft has found a way to create an elusive kind of particle Majorana zero mode that could potentially revolutionize quantum computing.

- Majorana zero modes can be used to realize the more powerful **topological quantum-computing**. Hence statement 1 is correct
- Here the information is protected due to topological degeneracy. Hence statement 2 is correct.
- **Degeneracy** in quantum mechanics means that the system has multiple states at the same energy. In topological systems, the system has multiple states at the lowest or ground state energy.
- **Topology** is the study of those properties of matter that don't change when it undergoes *continuous deformation* – i.e. when it's stretched, folded, twisted, etc., but not ruptured or glued to itself.
- The Majorana zero mode is composed of two entities (electron and hole), so say we pull the entities apart and keep them at a distance from each other. In this configuration, physicists have found that even if one of the entities is disturbed, the overall qubit doesn't decohere, and continues to protect the encoded information. Hence statement 3 is correct

8. (c)

In News: Chandrayaan 3 aims to explore the south pole of the Moon by making a soft landing on its surface. Hence, Statement 1 is correct.

- The lander of the mission has recently successfully completed the crucial EMI-EMC (Electro - Magnetic Interference/ Electro - Magnetic Compatibility) test at the U.R. Rao Satellite Centre in Bengaluru.
- **Statement 2 is correct:** Chandrayaan-3 is India's third moon mission and is slated to be launched by **Launch Vehicle Mark 3 (LMV3)** from the Satish Dhawan Space Centre at Sriharikota.
 - Chandrayaan 2 mission was launched on by rocket GSLV MkIII-M1 and GSLV MkIII-M1 was renamed **Launch Vehicle Mark 3 (LMV3)** recently.

9. (c)

All three statements are correct

- Synthetic biology is a field of science that involves **redesigning organisms** for **useful purposes** by engineering them to have new abilities.
- Synthetic biology researchers and companies around the world are harnessing the **power of nature** to solve problems in **medicine, manufacturing and agriculture**. Hence, Statement 1 is correct.
- An early attempt in this direction was led by researchers at the **J. Craig Venter Institute (JCVI)** in US. In 2008, they attempted to synthesise a small bacterial genome, but at the time were unable to put it back into the cell and give it a spark of life.
- Finally, in 2010, researchers at JCVI were able to synthesise a complete genome of around 1 million base-pairs of a modified genome of a free-living organism called **Mycoplasma mycoides**. They named it **JCVI-syn1.0**. Hence, Statement 2 is correct.

Applications

- Microorganisms harnessed for **bioremediation** to clean pollutants from our water, soil and air.
- **Rice modified** to produce **beta-carotene**, a nutrient usually associated with carrots, that prevents vitamin A deficiency.
- **Yeast engineered** to produce **rose oil** as an eco-friendly and sustainable substitute for real roses that perfumers use to make **luxury scents**. Hence, Statement 3 is correct.

10. (b)

Statement 1 is correct: Cloud storage: It is a method through which digital data, including files, business data, videos, or images, are stored on servers in **off-site locations**.

Statement 2 is not correct: Liability: The onus of ensuring data security **lies with the companies** even though they grant access to data to vendors and partners.

- If the data is sensitive in nature, it is the company's responsibility to make sure that a selected vendor has all the right checks in place and has conducted due diligence.

Statement 3 is correct: These servers may be maintained by the companies themselves or by third-party providers responsible for hosting, managing, and securing stored data.

- These servers can be accessed either by the **public or through private internet** connections, depending on the nature of the data.

11. (a)

Statement 1 is correct: It allows the government to **issue content-blocking orders to online intermediaries** such as Internet Service Providers (ISPs), telecom service providers, web hosting services, search engines, online marketplaces, etc.

Statement 2 and 3 are not correct: The Section requires the **information or content being blocked to be deemed a threat to India's national security, sovereignty, or public order**.

- **Both centre and state governments** may direct agencies to intercept, monitor or decrypt or cause to be intercepted or monitored or decrypted any information generated, transmitted, received or stored in any computer resource.
- As per rules that govern these blocking orders, any request made by the government is sent to a review committee, which then issues these directions.

12. (d)

In News: Scientists from the University of Oxford have come up with a new way to obtain **fluorine atoms** in a much safer and less energy-intensive way.

Statements 1 and 2 are correct: Fluorine atoms used to **manufacture important chemical compounds** used in industry and research.

- Fluorine is a highly reactive element used to make **fluorochemicals**, which in turn are used to produce plastics, agrochemicals, lithium-ion batteries, and drugs.
- Fluorine comes from a calcium salt called **calcium fluoride, or fluorspar**.
- Fluorspar is mined and then treated with sulphuric acid at a high temperature to release **hydrogen fluoride (HF)**.
- HF is then made to react with other compounds to create **fluorochemicals**.
- HF is an extremely **poisonous and corrosive** liquid that irritates the eyes and respiratory tract even at low concentrations.

13. (a)

Wi-Fi Access Network Interface (WANI):

- The creation of **inter-operable public Wi-Fi hotspots** was one such idea proposed by the Telecom Regulator of India (TRAI) in 2017.
- Similar in **concept to the PCOs of the past**, it proposed to create millions of interoperable Wi-Fi hotspots, Public Data Offices (PDOs), for the last mile distribution of broadband to the common people in sachet-sized packages of Rs 5 to 10.
- This system **can provide community content** without using the bandwidth.
- The idea was successfully piloted as the **Wi-Fi Access Network Interface, or WANI**.

ENVIRONMENT & ECOLOGY

1. Consider the following pairs:

Species	IUCN Status
1. Chinkara	Least Concern
2. Blue Pansy	Critically Endangered
3. Santa Fe frog	Near Threatened
4. Bald Eagle	Vulnerable

How many pairs given above are **not** correctly matched?

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

2. Consider the following statements with respect to Ambergris:

1. Due to its high value in the market, ambergris is often called the 'floating gold' and 'treasure of the sea'.
2. It is used to produce perfumes which have notes of musk.
3. It is a tradable commodity in Australia and USA.

How many statements given above is/are correct?

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

3. Consider the following statements:

1. Blue hydrogen is produced when natural gas is split into hydrogen and carbon dioxide.
2. Green hydrogen is produced when hydrogen is produced by splitting water by electrolysis.
3. Brown hydrogen is formed through coal gasification.

Which of the given above statements is/are correct?

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

4. Consider the following statements:

1. Ethanol is naturally produced by the fermentation of sugars.
2. The government has advanced its target to achieve 20 percent ethanol blending in petrol from 2020 to 2030.

Which of the statements given above is/are correct?

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

5. "Global Forest Watch" research was recently established by which of the following?

- (a) Food and Agriculture Organisation (FAO)
(b) International Union for Conservation of Nature (IUCN)
(c) World Resources Institute (WRI)
(d) The United Nations Environment Programme (UNEP)

6. With reference to the World Resources Institute's (WRI) Global Forest Watch, consider the following statements:
1. The total global tree cover in 2022 increased by 10%.
 2. India lost 17% of the humid primary forest between 2021 and 2022.
 3. Countries like Brazil and the Democratic Republic of Congo, with substantial tropical forest cover, experienced significant forest gain in 2022.
- How many statements given above is/are correct?
- (a) Only one (b) Only two
(c) All three (d) None
7. Consider the following statements regarding the Forest (Conservation) Amendment Bill, 2023:
1. The Act restricts the de-reservation of forest or use of forest land for non-forest purposes.
 2. The proposed changes aim to build forest carbon stock by raising plantations.
 3. Under the Act, the state government requires prior approval of the central government to assign forest land through a lease.
- Which of the statements given above are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
8. With reference to the Atlantic menhaden, consider the following statements:
1. They are only found in the brackish water of the Atlantic ocean.
 2. They are also referred to as fatbacks or bunkers.
 3. They are overfished for human consumption.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
9. With reference to Hoolock gibbon, which of the following statements is/are correct?
1. It is India's only ape and unique to the Northeast part of the country.
 2. It is listed as Least Concerned under the IUCN Red List of Threatened Species.
- 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. From which of the following countries India has translocated Cheetahs in Kuno National Park?
- (a) Iran
(b) South Africa and Namibia
(c) Kenya and Uganda
(d) Sudan and South Sudan
11. With reference to the India Climate Energy Dashboard (ICED) 3.0, which of the following statements is/are correct?
1. ICED is released by NITI Aayog.
 2. ICED 3.0 enables users to freely access and analyze real-time data on the energy sector.
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

12. *Ludwigia Peruviana* is often seen in news, it is related to which of the following?
- (a) Large reptile (b) Diurnal raptor
(c) Aquatic weed (d) Crab-eating macaque
13. "People's Biodiversity Register" is mandated under which of the following Acts?
- (a) Forest Conservation Act, 1980
(b) Environment Protection Act, 1986
(c) Forest Rights Act, 2006
(d) Biological Diversity Act, 2002
14. With reference to Mangroves, consider the following statements:
1. Mangrove forests only grow at tropical and subtropical latitudes near the equator.
 2. These trees grow in areas with high-oxygen soil.
 3. Odisha is a home to about 40% of the mangrove forests in India.
- 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
15. With reference to Western Ghats, which of the following statements is/are correct?
1. It is a long mountain chain which covers an area under Five states of India.
 2. Anamudi is the highest mountain peak of Western Ghat.
 3. K Kasturirangan committee report classified 64 percent of the Western Ghats as Ecologically Sensitive Zones.
- How many of the statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None
16. Consider the following pairs:
- | Protected Area | State |
|---------------------------------|-------------|
| 1. Intanki elephant Reserve | Manipur |
| 2. Kali Tiger Reserve | Maharashtra |
| 3. Mayurjharna Elephant Reserve | West Bengal |
- How many of the above pairs are correctly matched?
- (a) Only one (b) Only two
(c) All three (d) None
17. With reference to the Western Ghats, Consider the following statements:
1. The Ghats runs through the States of Kerala, Maharashtra and Gujarat only.
 2. They are known as Sahyadri in the State of Gujarat.
 3. They are recognized as one of the world's eight 'hottest hotspots' of biological diversity.
- How many statements given above are correct?
- (a) Only one (b) Only two
(c) All three (d) None

EXPLANATIONS

1. (b)

Chinkara (Indian Gazelle) are horned ruminants inhabiting arid and semi-arid grasslands.

- The range covers much of western and central India, extending through Pakistan, south-western Afghanistan and into north-central Iran.

IUCN Status: Least Concern (**Correctly Matched**)

Blue Pansy is a species of vibrant blue butterflies.

- **It is found in** various parts of Southeast Asian countries, Australia, and Africa.
- **IUCN status:** Least Concern.

Santa Fe frog is a rare species and a leopard-print frog.

- It occurs in the Gran Chaco of Paraguay, Bolivia and Argentina.
- **IUCN status:** Near Threatened (**Correctly Matched**)

Bald eagles

- It is the only eagle solely native to North America.
- They are North American birds. Their range extends from the Mexico border through the United States and Canada.
- The birds are extremely populous in Alaska.

IUCN Status: Least Concern.

2. (b)

Statement 1 and 2 are correct:

What is Ambergris?

- Ambergris means **grey amber in French**, is a **waxy substance** that originates from the **digestive system** of sperm whales.
- The freshly passed ambergris is a **light yellowish substance and is fatty** but as it ages it **turns waxy and gets red-brownish**, sometimes with shades of grey and black in colour and attains a mild, earthy, sweet smell but still with notes of mild marine odour.
- Due to its high value in the market, ambergris is often called the '**floating gold**' and '**treasure of the sea**'.
- Ambergris is a **rare substance**, which contributes to its high demand and high price in the international market.
- Traditionally, it is used to **produce perfumes** which have **notes of musk**.

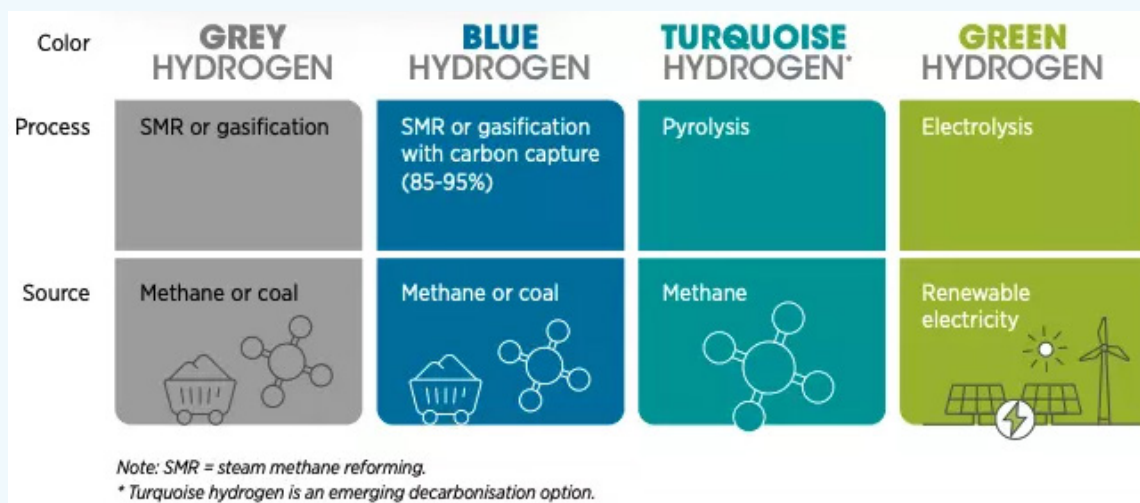
Statement 3 is not correct: There is a **ban** on the possession and trade of ambergris in countries like the USA, Australia and India but in several other countries it is a tradable commodity, though with limitations in some of them.

3. (d)

Statement 1 is correct: Blue hydrogen is hydrogen produced from natural gas with a process of steam methane reforming, where natural gas is mixed with very hot steam and a catalyst. It split into hydrogen and carbon dioxide.

Statement 2 is correct: Green hydrogen derived from water electrolysis using renewable electricity.

Statement 3 is correct: Brown hydrogen is formed through coal gasification.



4. (a)

In News: The Union Minister of Petroleum and Natural Gas has said that 20 percent ethanol blended petrol, E20, will be available across India by 2025.

Statement 1 is correct: Ethanol is one of the principal biofuels, which is **naturally produced by the fermentation of sugars** by yeasts or via petrochemical processes such as ethylene hydration.

- It has medical applications as an antiseptic and disinfectant.
- It is used as a chemical solvent and in the synthesis of organic compounds, apart from being an alternative fuel source.

Statement 2 is not correct: The government has been promoting the use of ethanol as a blend stock with main automotive fuel like petrol in line with the **National Policy on Biofuels - 2018 under the Ethanol Blended Petrol (EBP) Programme**.

- Under this programme, an indicative target of 20% blending of ethanol in petrol by 2030 was laid out.
- The government has advanced its target to achieve **20 percent ethanol blending in petrol from 2030 to 2025-26**.

5. (c)

Global Forest Watch:

- Recently, new research was established by the **World Resources Institute's (WRI) Global Forest Watch**.
- **Loss of forest Cover:** Tropical areas lost 4.1 million hectares of forest cover. This is equivalent to **losing an area of 11 football fields per minute**.
 - This forest loss produced **2.7 billion tonnes of carbon dioxide emissions**, which is around the same as **India's annual emissions** due to the **combustion of fossil fuels**.
- **Declining forest cover:** The total global tree cover loss in 2022 declined by 10%. This includes primary, secondary, and planted forests. This decrease, according to Global Forest Watch, is a direct result of a **decrease in fire-related forest losses** which decreased 28% from 2021.
 - Non-fire losses in 2022 increased by slightly less than 1%.

6. (a)

Recently, new research was established by the **World Resources Institute's (WRI) Global Forest Watch**.

Statement 1 is not correct: Declining forest cover: The total global tree cover loss in 2022 declined by 10%. This includes primary, secondary, and planted forests. This decrease, according to Global Forest Watch, is a direct result of a **decrease in fire-related forest losses** which decreased 28% from 2021.

Non-fire losses in 2022 increased by slightly less than 1%.

Statement 2 is correct: India: India lost 43.9 thousand hectares of humid primary forest between 2021 and 2022.

This accounts for 17% of the country's total tree cover loss in the period.

Statement 3 is not correct: Globalwide Progress: Countries like Brazil and the Democratic Republic of Congo, with substantial tropical forest cover, experienced significant losses in 2022.

7. (d)

The Forest (Conservation) Amendment Bill, 2023

Statement 1 is correct: Restrictions on activities in forest:

- The Act **restricts the de-reservation of forest or use of forest land for non-forest purposes**.
- Such restrictions **may be lifted** with the prior approval of the central government.
- **Non-forest purposes** include **use of land for cultivating horticultural crops** or for **any purpose other than reforestation**.
- **Statement 2 is correct: Building forest carbon stock & improving livelihood:** The predominant idea of the proposed changes is **to build forest carbon stock by raising plantations**.
- The Bill talks about keeping up with **"dynamic changes in the ecological, strategic and economic aspirations of the country"** and **"improvement of livelihoods for forest-dependent communities."**
- The scope of the amendments boils down to **pushing plantations to achieve carbon neutrality** by limiting the scope of the Act.
- **Statement 3 is correct: Assigning of land through a lease or otherwise:** Under the Act, **state government or any authority** requires prior approval of the central government to direct the assigning of forest land **through a lease or otherwise to any organisation** (such as private person, agency, authority, corporation) not owned by the government.

8. (a)

About Atlantic menhaden

Appearance: Menhaden are silvery in color with a distinct black shoulder spot behind their gill opening.



Statement 1 is not correct: Distribution: Brevoortia tyrannus, commonly called the Atlantic Menhaden, can be found anywhere in the western Atlantic, Nova Scotia, Canada and southward to Indian River, Florida, USA. Menhaden are also common in all salinities of the Chesapeake Bay.

- They swim in large schools close to the water's surface during the spring, summer, and fall.
- **Habitat:** For the most part menhaden can be found at a depth of up to -20m. This puts them in the **pelagic, brackish, marine area** of the Atlantic Ocean.

Statement 2 is correct: Life Span: Menhaden can live to be **10 to 12 years old**. Menhaden eat both phytoplankton and zooplankton. When they are well-fed, they are referred to as **fatbacks or bunkers**.

Statement 3 is not correct: Threat: Menhaden have been consistently overfished for more than a century for their **commercial use**.

- The fish is **too small and oily to eat**, menhaden are harvested for other purposes, including:
 - fertilizers
 - animal feed
 - human and animal supplements
 - cosmetics
 - bait.

9. (a)

- Recently the first meeting of the Global Gibbon Network (GGN) was held at Haikou in the Hainan province of China.
- The hoolock gibbon is a primate species of genus Hoolock in the gibbon family, Hylobatidae. It is one of 20 species of gibbons on Earth.
- It is India's **only ape and found in the Northeast**. Also it is the smallest and fastest of all apes. **Hence, Statement 1 is correct.**
- **Conservation status:** IUCN categorized the western hoolock gibbon as **endangered** and the eastern hoolock gibbon as **vulnerable**. Also both the species are protected under the Indian Wildlife Protection Act 1972 and are included in **Schedule 1**. **Hence, Statement 2 is not correct.**

10. (b)

September 2023 will mark one year since a batch of 8 cheetahs from **Namibia** arrived in India. They were followed by 12 others from **South Africa** in February 2022.

- Project Cheetah is India's cheetah relocation programme and is perhaps among the most ambitious of its kind in the world.
- The attempt is to, over the next decade, bring in **5-10 animals every year** until a self-sustaining population of about 35 cheetahs is established.
- Kuno National Park is a national park in Madhya Pradesh established in 1981 as a wildlife sanctuary.

11. (c)

Statement 1 and Statement 2 both are correct.

In News: NITI Aayog released the India Climate Energy Dashboard (ICED) 3.0.

- The ICED is the country's one-stop platform for **real-time data on the energy sector, climate, and related economic datasets based on government published sources**.
- Developed as a user-friendly platform, **ICED 3.0 enables users to freely access and analyze datasets using an analytical engine**.
- The Portal will draw insights from the available data parameters and hence be useful in monitoring the Climate Action Progress.

12. (c)

In News: *Ludwigia Peruviana* is threatening elephant habitats and foraging areas in Valparai, a Tamil Nadu hill station (Located within the Annamalai Tiger Reserve) close to the Kerala border.

Ludwigia Peruviana is an **aquatic weed** native to some countries in **Central and South America, including Peru**.

- It grows fast along water bodies.
- It is among the **22 priority invasive plants** in **Tamil Nadu**.

13. (d)

As per the **Biological Diversity Act, 2002**, the local bodies constitute the Biodiversity Management Committees(BMC) within their area of jurisdiction, which prepares, maintains and validates **People's Biodiversity Register (PBR)** in consultation with the local people.

- The register gives information about the details of biological resources and traditional knowledge available within the jurisdiction of BMC.

14. (b)

Statement 1 is correct: Mangrove forests **only grow at tropical and subtropical latitudes near the equator** because they cannot withstand freezing temperatures.

Statements 2 and 3 are not correct: All of these trees grow in areas with **low-oxygen soil**, where slow-moving waters allow fine sediments to accumulate.

- **West Bengal** is a home to about **40% of the mangrove forests in India**.

15. (a)

Statement 1 is not correct: The Western Ghats are a **1,600-km** long mountain chain along the west coast of India running from the river Tapi in the north to Kanyakumari in the south.

It covers **six states** — Gujarat, Maharashtra, Goa, Tamil Nadu, Karnataka and Kerala. About 60 percent of the mountain range is in Karnataka.

Statement 2 is correct: **Anamudi** is the highest mountain peak of Western Ghat.

Statement 3 is not correct: Western Ghats were accorded the **World Heritage Status by UNESCO** in **2012**. The Kasturirangan report notified only **37 percent** of the area as an ecologically sensitive area.

- It also split the Western Ghats into cultural (human settlements) and natural (non-human settlements) regions. It was suggested that cultural lands be designated as an ecologically sensitive area (ESA).

16. (a)

Pairs 1 and 2 are not correct.

- **Intanki National Park in Nagaland**, it is a home to varied wildlife, which include Golden langur, Hoolock gibbon, Palm civets, Tiger, Sloth bear, Wild dogs, Flying squirrel, Black stork, Monitor lizard, Python etc. In the year 2005, the park was **declared as an elephant reserve** by the government.
- **Kali Tiger Reserve, earlier known as Dandeli-Anshi Tiger Reserve**, is located in **Karnataka**. The Tiger Reserve comprises two important protected areas of the region viz., Dandeli Wildlife Sanctuary and Anshi National Park. Forests are primarily **moist deciduous and semi-evergreen**, with **patches of evergreen forests**. Animals found in the Reserve include Tiger, Spotted deer, Sloth bear, Wild boar, Hanuman langur, Bonnet macaque., etc. Kali Tiger Reserve is **home to rare black panthers**.
- **Mayurjharna Elephant Reserve, West Bengal** is the elephant reserve in east India which was set up in the year 1987 and was proclaimed as an Elephant Reserve on 24th October, 2002.

17. (a)

Statement 1 and 2 are not correct: Western Ghats is a chain of mountains running parallel to India's western coast, approximately 30-50 km inland, the Ghats traverse the States of **Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat** from the river Tapti in the north to the southern tip of India.

The part of western Ghats falling in the **state of Maharashtra** is known as **Sahyadri** and is sometimes called the **Great Escarpment of India**.

Statement 3 is correct: These mountains cover an area of around 140,000 km² in a **1,600 km long stretch** that is interrupted only by the 30 km Palghat Gap at around 11°N.

A significant characteristic of the Western Ghats is the **exceptionally high level of biological diversity and endemism**. This mountain chain is recognized as one of the **world's eight 'hottest hotspots'** of biological diversity along with Sri Lanka.



HEALTH

1. With reference to the sickle cell anaemia, consider the following statements:
 1. It is transmitted by parents carrying a defective 'beta globin' gene.
 2. Under the National Sickle Cell Anaemia Elimination Mission India aims to eliminate sickle cell genetic transmission by the year 2047.
 3. The first description of sickle haemoglobin in India was found in the tribal populations in the Nilgiri hills in south India.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
2. Consider the following statements:
 1. Locally acquired malaria denotes cases where the disease presents in patients with no travel history.
 2. Malaria is a viral disease spread by mosquito.
 3. Malaria is contagious and can spread from one person to another.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
3. Consider the following statements:
 1. Antimicrobials include antibiotics, fungicides, antiviral agents and parasiticides.
 2. Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
4. With reference to the Leptospirosis, consider the following statements:
 1. It is an infectious zoonotic disease caused by a bacterium leptospira.
 2. Female species of mosquitoes are the carrier of the disease.
 3. Extreme cold temperature is one of the causes or facilitator of the disease.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
5. With reference to the brain-eating amoeba, consider the following statements:
 1. It is a single-cell organism found in cold brackish water.
 2. The amoeba enters the body through the nose leading to a severe brain infection known as primary amebic meningoencephalitis (PAM).

Which of the statements given above is/are correct?

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

6. Consider the following statements:

1. Ayushman Bharat is an attempt to move towards a sectoral and segmented approach of health service delivery.
2. Establishment of Health and Wellness Centres is the base pillar of Ayushman Bharat.
3. Ayushman Bharat-Health and Wellness Centres provide free essential medicines and diagnostic services.

How many statements given above is/are correct?

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

7. Consider the following statements regarding the Candida auris:

1. It is a species of bacteria belonging to the genus Candida.
2. Candida normally lives on skin and inside the body, such as the mouth, throat, gut, and vagina, without causing problems.
3. Patients with invasive C. auris infection are more likely to die than patients with other invasive Candida infections.

How many statements given above is/are correct?

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

8. With reference to Guillain-Barré Syndrome, which of the following statements is/are correct?

1. It is a rare neurological disorder where the body's immune system mistakenly attacks its own peripheral nerve cells.
2. Plasmapheresis can cure the syndrome completely.

Select the correct answer using the code given below:

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

9. Consider the following pairs:

Vector-borne disease	Target of eradication
1. Malaria	2050
2. Lymphatic Filariasis	2030
3. Kala-Azar	2025

How many pairs given above are correctly matched ?

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

10. With reference to Crimean-Congo haemorrhagic fever (CCHF), which of the following statements is/are correct?

1. It is a Bacterial haemorrhagic fever usually transmitted by ticks.
2. It is endemic to Africa, the Balkan countries, Middle East, and parts of Asia.

3. Recently a vaccine JYNNEOS has been developed to protect against it.

How many of the statements given above are correct?

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

11. With reference to the Alzheimer's Disease, consider the following statements:

1. It is a progressive form of dementia named after Dr. Alois Alzheimer.
2. It is most common in people aged between 50-60.
3. The monoclonal antibody donanemab has been discovered that can cure the disease.

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:

1. Bacteriophages are the bacteria that kill viruses.
2. Bacteriophages are harmless to human cells as they do not recognize them as their prey.

Which of the statements given above is/are correct?

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

13. With reference to the E-cigarettes, which of the following statements is/are correct?

1. They do not fall within the ambit of the Cigarettes and Other Tobacco Products Act (COTPA) 2003.
2. E-cigarettes can be used as an alternative to regular cigarettes as they contain no toxic chemicals.

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. Consider the following statements:

1. Hepatitis is an inflammation of the kidney which can lead to the condition of cirrhosis.
2. There is no effective vaccine against hepatitis C.
3. Hepatitis is an air borne disease which is spread through the air droplets.

How many of the statements given above are correct?

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

15. With reference to the rabies, which of the following statements is/are correct?

1. It is a zoonotic disease caused by bacteria.
2. Rabies is 100% fatal but 100% vaccine-preventable.

Select the correct answer using the code given below:

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

16. The 'Global Drug Facility', recently was in the news, primarily talks about which of the following diseases?

- (a) Tuberculosis (b) HIV/AIDS
(c) Malaria (d) Covid-19

17. Which of the following are the features of the National Nursing and Midwifery Commission Bill, 2023?
1. It repeals the Indian Nursing Council Act, 1947.
 2. It will set up the National Nursing and Midwifery Commission (NNMC) that will consist of 50 members.
 3. New nursing and midwifery institution would be established with Permission of the Assessment and Rating Board.

Select the correct answer using the code given below:

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

18. Which of the following are conducted by the International Institute for Population Sciences (IIPS)?

1. National Family Health Survey (NFHS)
2. District Level Household Survey (DLHS)
3. Assessment of National Rural Health Mission (NRHM)
4. YOUTH in India Project
5. Global Adult Tobacco Survey

Select the correct answer using the code given below:

- 1, 2 and 5 only
- 1, 3 and 4 only
- 2 and 5 only
- 1, 2, 3, 4 and 5

19. With reference to the Cell-free DNA (cfDNA), consider the following statements:

1. Cell Free DNA is found in the bloodstream and other fluids present in the body.
2. It exists in the form of a double helix structure.

Which of the statements given above is/are correct?

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

EXPLANATIONS

1. (c)

All three statements are correct: Sickle cell disease is a **hereditary disease** caused by mutations in one of the genes that encode the **hemoglobin protein**, the disease is inherited as an autosomal recessive trait.

Causes: It is transmitted by parents carrying a defective '**beta globin**' gene. For a child to be affected, both mother and father must carry one copy of the sickle cell gene — also known as **sickle cell trait** — and pass both copies of the altered form to the child.

National Sickle Cell Anaemia Elimination Mission

Background: The programme was first announced in the Union Budget 2023.

Coverage: It will be implemented in **17 high-focus states** across namely Gujarat, Maharashtra, Rajasthan, Madhya Pradesh, Jharkhand, Chhattisgarh, West Bengal, Odisha, Tamil Nadu, Telangana, Andhra Pradesh, Karnataka, Assam, Uttar Pradesh, Kerala, Bihar, and Uttarakhand.

Target: It aims to **eliminate sickle cell genetic transmission by the year 2047** (i.e. before India celebrates Amrit Kaal in 2047).

The Union Ministry of Health tribal health expert committee report has listed sickle cell disease **as one of the 10 special problems in tribal health** that affect the tribal people disproportionately.

The **first description of sickle haemoglobin in India** was by **Lehman and Cutbush in 1952** in the tribal populations in the **Nilgiri hills in south India**.

2. (a)

Statement 1 is correct: Locally acquired malaria denotes cases where the disease presents in patients with **no travel history**, indicating that it has been acquired within their geographical area. A locally acquired case would mean that the mosquito transmitting the disease first bit a person carrying the malaria-causing parasite and then another person, thus transmitting the disease locally.

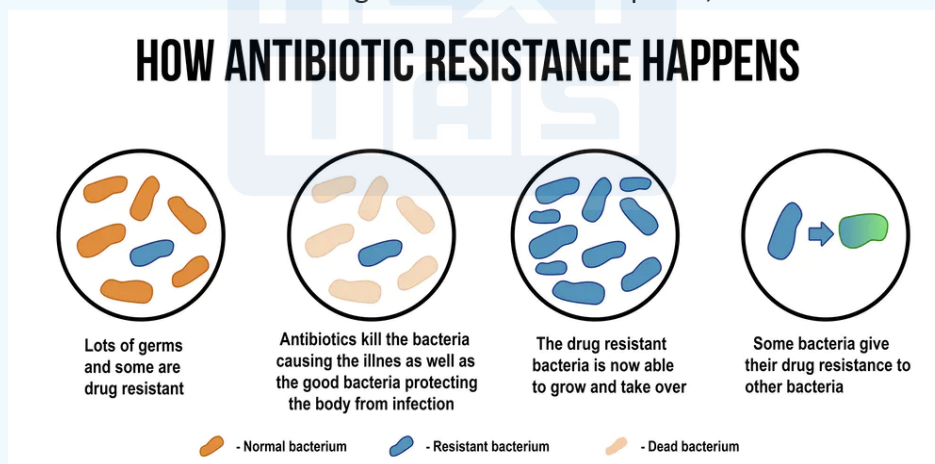
Statement 2 and 3 are not correct: Malaria is an **acute febrile illness** caused by **Plasmodium parasites**, which are spread to people through the bites of **infected female Anopheles mosquitoes**. It is preventable and curable.

Malaria is **not contagious** and cannot spread from one **person to another**; the disease is transmitted through the bites of female Anopheles mosquitoes.

Five species of parasites can cause malaria in humans and 2 of these species – **Plasmodium falciparum** and **Plasmodium vivax** – pose the greatest threat.

3. (c)

Both statements 1 and 2 are correct: Antimicrobial Resistance (AMR) occurs when **bacteria, viruses, fungi and parasites** change over time and **no longer respond to medicines** making infections harder to treat and increasing the risk of disease spread, severe illness and death.



Antimicrobials: Antimicrobials are **agents used to prevent, control and treat infectious diseases in humans, animals and plants**.

They include antibiotics, fungicides, antiviral agents and parasiticides. Disinfectants, antiseptics, other pharmaceuticals and natural products may also have antimicrobial properties.

4. (a)

Statement 1 is correct: Leptospirosis is an infectious zoonotic disease caused by a **bacterium** called ***Leptospira interrogans***, or **leptospira**.

Statement 2 and 3 are not correct: **Causes for disease**

Carriers: Wild or domestic animals like pigs, cattle, water buffaloes, goats, dogs, horses, and sheep.

Onset of the monsoon: It facilitates the disease's incidence and transmission.

- **Humid environment:** It helps the pathogenic leptospira survive longer, thus increasing the risk of disease exposure in the community.
- **Extreme weather events:** Floods and hurricanes, when people are exposed to contaminated water.
- **Poor waste management:** A high density of stray animals, faulty drainage systems, and unhygienic sanitation facilities are major drivers of the disease in urban areas. In rural parts, these are contaminated paddy fields, dirty livestock shelters, and poor water-quality and sanitation.

5. (b)

A 15-year-old boy in Kerala's Alappuzha district has died due to a rare infection caused by *Naegleria fowleri* or "**brain-eating amoeba**".

Statement 1 is not correct: It is a **single-cell organism found in a warm freshwater environment** such as lakes, hot springs and even in poorly maintained swimming pools.

Activities like diving or jumping into warm freshwater bodies can force water up the nose, providing an entry point for the amoeba.

Statement 2 is correct: The amoeba enters the body through the nose and travels to the brain, leading to a severe and usually fatal brain infection known as **primary amebic meningoencephalitis (PAM)**.

The symptoms usually appear within a week of infection and include severe headache, fever, nausea, vomiting, stiff neck, confusion, seizures and hallucinations.

6. (b)

Statement 1 is not correct: Ayushman Bharat is an attempt to move from a sectoral and segmented approach of health service delivery to a **comprehensive need-based health care service**.

Ayushman Bharat aims to undertake path breaking interventions to **holistically address health** (covering prevention, promotion and ambulatory care), at primary, secondary and tertiary level.

Statement 2 and 3 are correct: Ayushman Bharat adopts a continuum of care approach, comprising of two interrelated components, which are -

- Establishment of Health and Wellness Centres
- Pradhan Mantri Jan Arogya Yojana (PM-JAY)

In 2018, the Government of India announced the creation of **1,50,000 Health and Wellness Centres (HWCs)** by transforming existing Sub Centres and Primary Health Centres as the **base pillar of Ayushman Bharat**.

The **National Health Policy of 2017** envisioned these centres as the **foundation of India's health system**.

AB-HWCs provide **free essential medicines and diagnostic services**, teleconsultation, and health promotion including wellness activities like Yoga.

7. (b)

Statement 1 is not correct: Candida auris is an emerging multidrug-resistant **oval-shaped fungus** causing life-threatening outbreaks, often in healthcare settings. Candida auris is a **yeast species** belonging to the **genus Candida**.

Statement 2 and 3 are correct: Candidiasis is a **fungal infection** caused by a yeast (a type of fungus) called **Candida**.

- Some species of Candida can cause infection in people; the most common is **Candida albicans**.
- Candida normally **lives on skin and inside the body**, such as the mouth, throat, gut, and vagina, without causing problems.

Invasive infections with any *Candida* species **can be fatal**. Patients with invasive *C. auris* infection are more likely to die than patients with other invasive *Candida* infections.

In some patients, this yeast can **enter the bloodstream and spread throughout the body**, causing serious invasive infections. This yeast often does not respond to commonly used antifungal drugs, making infections difficult to treat.

8. (a)

In News: The Peruvian government has recently declared a state of national emergency for up to three months, due to a spike in the number of cases of Guillain-Barré Syndrome.

- Guillain-Barré Syndrome is a **rare neurological disorder** where the body's immune system — which normally protects it from infections and other foreign bodies — mistakenly attacks its own peripheral nerve cells. **Hence, statement 1 is correct.**
- **Effects:** The peripheral nerves — the nerves that branch out from the brain and the spinal cord — get damaged and as a result, the muscles can become weak or paralyzed.
- Currently, there is **no certain cure** for Guillain-Barré Syndrome. However, there are **two treatments** that can help recovery and reduce the severity of the disease. **Hence, Statement 2 is not correct.**
- **Plasma exchange or plasmapheresis:** The plasma or the liquid part of the blood is removed and separated from the blood cells, inducing new plasma production to make up for the loss. This treatment is aimed at removing the antibodies which are attacking the peripheral nerves.
- **Immunoglobulin therapy:** The healthy antibodies from blood donors are injected intravenously. The damaged antibodies contributing to GBS are then blocked by the high doses of the immunoglobulins.

9. (a)

In News: The Union health ministry has sounded the alarm on a vector-borne disease outbreak with record rainfall in North India creating a favourable breeding ground for disease-carrying mosquitoes. **Vector-borne diseases** are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors.

They are of six types (Malaria, Dengue, Chikungunya, Japanese Encephalitis, Lymphatic Filariasis, Kala-Azar). The Government of India is dedicated to curb these diseases and has the target of eliminating **Malaria by 2030, Lymphatic Filariasis by 2030 and Kala-Azar by 2023.**

10. (a)

In News: A deadly virus known as **Crimean-Congo hemorrhagic fever (CCHF)** has become a threat to humanity in Europe, Africa and the Middle East.

Statement 1 is not correct: Crimean-Congo haemorrhagic fever (CCHF) **is a viral haemorrhagic fever usually transmitted by ticks.** The virus is present in the tick family of insects. Animals such as cattle, goats, sheep and hares “serve as amplifying hosts for the virus.”

Statement 2 is correct: The CCHF is **endemic to Africa, the Balkan countries, Middle East, and parts of Asia.** To humans it occurs through contact with infected ticks or animal blood. Human to human transmission occurs by contact with infectious blood or body fluids”, such as sweat and saliva.

Statement 3 is not correct: **JYNNEOS** is a 2-dose vaccine developed to protect against mpox and smallpox infections.

11. (a)

Statement 1 is correct: Alzheimer's disease is a **progressive form of dementia**. Dementia is a **broader term** for conditions that **negatively affect memory, thinking, and behavior**.

- The disease is named after **Dr. Alois Alzheimer**.
- **Statement 2 and 3 are not correct:** Alzheimer's disease is **most common** in people **over the age of 65**.
- The exact cause of Alzheimer's disease **is not yet fully understood**, although a number of things are thought to **increase risk** of developing the condition. These include:
 - increasing age,
 - a family history of the condition,
 - untreated depression, although depression can also be one of the symptoms of Alzheimer's disease,
 - lifestyle factors and conditions associated with cardiovascular disease.
- **Treatment:** There's currently **no cure** for Alzheimer's disease, but medicines are available that can help relieve some of the symptoms.
- The **monoclonal antibody donanemab** has been shown to significantly slow the progression of **Alzheimer's disease if treated early**.
 - **Lecanemab**, a monoclonal antibody that has the **ability to reduce amyloid beta protein plaques in the brain** — a defining feature of Alzheimer's was approved this year for the therapy.

12. (b)

Statement 1 is not correct:

What are Bacteriophages?

- The vast majority of viruses inside humans are bacteriophages — **viruses that kill bacteria in microbiomes**.
- Bacteriophages, also known as phages, **are harmless to human cells** as they do not recognize them as their bacterial prey. **Hence, Statement 2 is correct.**
- They work by **hunting down bacteria** and attaching themselves to the surface of a bacterial cell, before injecting viral DNA material into the cell. The viral DNA then replicates inside the bacteria, once enough new viruses have been created inside the bacterial cell, the **cell then bursts to release the new viral particles**.

13. (a)

Statement 1 is correct: E-cigarettes are electric devices that produce an aerosol by heating a liquid that usually contains nicotine—the addictive drug in regular cigarettes—flavorings, and other chemicals that help to make the aerosol. Users inhale this aerosol into their lungs. As e-cigarettes contain nicotine and not tobacco, these do not fall within the ambit of the **Cigarettes and Other Tobacco Products Act (COTPA) 2003**.

Statement 2 is not correct: They can contain some harmful substances such as **nicotine, heavy metals** like lead, volatile organic compounds, and cancer-causing agents. According to a study, it can damage immunity, disable cells in the lungs and cause inflammation.

14. (a)

Statements 1 is not correct: Hepatitis means **inflammation of the liver**, which is a vital organ that processes nutrients, filters the blood, and fights infections.

Statement 2 is correct: There is **no effective vaccine against hepatitis C**. People who test positive for hepatitis C should be treated with medication right away. The sooner the treatment starts the better it will be at preventing liver damage and further spread. **Statement 3 is not correct:** The most common types of viral hepatitis are **hepatitis A, hepatitis B, and hepatitis C**. Hepatitis A is spread through **eating contaminated food or drink**, Hepatitis B through **blood, semen, or certain other body fluids and** Hepatitis C through infected blood.

15. (b)

In News: As per the Health Ministry data, Delhi saw the highest number of deaths due to rabies in the country in 2022.

Statement 1 is not correct: It is a **zoonotic viral disease** (Disease Transmitted from Animals to Humans).

It is caused by the **Rabies virus**, of the Lyssavirus genus, within the family Rhabdoviridae.

It is a Ribonucleic Acid (RNA) virus that is present in the saliva of a rabid animal (dog, cat, monkey, etc).

Rabies is 100% fatal but 100% vaccine-preventable. **Hence, statement 2 is correct.**

33% of global rabies deaths are recorded in India.

16. (a)

The Global Drug Facility (GDF) of 'Stop TB Partnership' facilitates global access to quality-assured, affordable TB diagnostics and treatments.

It has grown into a one-stop bundled procurement and supply mechanism providing a unique package of services that combine strategic procurement of TB products and coordination of market activities, with technical assistance and capacity-building for TB programmes.

This unique approach has made GDF the largest global provider of quality-assured TB products to the public sector and was recognized by world leaders in the United Nations Political declaration of the high-level meeting of the General Assembly on the fight against tuberculosis, which encouraged all nations to utilise GDF service.

17. (c)

In News: The Lok Sabha passed the National Nursing and Midwifery Commission Bill, 2023.

Statements 1 and 3 are correct: National Nursing and Midwifery Commission Bill, 2023 repeals the **Indian Nursing Council Act, 1947**. The Bill provides for the regulation and maintenance of standards of education and services for nursing and midwifery professionals.

Permission of the Assessment and Rating Board would be needed to establish a new nursing and midwifery institution, increase the number of seats, or start any new postgraduate course.

Statement 2 is not correct: The Bill provides for the constitution of the National Nursing and Midwifery Commission. **It will consist of 29 members**. The chairperson should have a postgraduate degree in nursing and midwifery and have at least 20 years of field experience.

18. (d)

In News: The Central government has suspended the Director of the International Institute for Population Sciences (IIPS), K.S. James, citing irregularity in recruitment.

The IIPS works under the Union Ministry of Health and Family Welfare.

Institute had conducted many prime surveys like National Family Health Survey (NFHS), District Level Household Survey (DLHS), Assessment of National Rural Health Mission (NRHM), YOUTH in India Project, Global Adult Tobacco Survey (GATS India Project), Research Intervention on Sexual Health Theory to Action (RISHTA Project), and Nutrition Surveys and Longitudinal Aging Study in India (LASI).

The IIPS' mandate is to contribute to the improvement of the population health outcomes and their determinants, and the achievement of health equity through programmatic initiatives.

19. (a)

Cell-free DNA (cfDNA) is a useful technique that is being used by researchers all over the world to better understand human diseases and enhance diagnosis, monitoring, and prognosis.

What is Cell-free DNA?

- Small nucleic acid fragments known as CfDNA are discovered in bodily fluids outside of cells after being discharged from cells.
- It was initially noticed in the blood of pregnant women in the late 1940s, which is when it was first discovered.
- Cell death and other physiological processes, for example, can both manufacture and release cfDNA from the cells.
- Several disease processes, including autoimmune conditions like systemic lupus erythematosus, are linked to the release of cfDNA.

How is Cell Free DNA different from Normal DNA?	
Cell Free DNA	Normal DNA
It is found in the bloodstream and other fluids present in the body.	Found within the cell nucleus or mitochondria
It is used in Forensic for DNA profiling and investigations.	It is typically not used in Forensic.
It exists in Fragmented form.	It exists in the form of a double helix structure.
It can be used in detecting infectious diseases.	It is not used for detecting infectious diseases.

INDIAN SOCIETY

1. Consider the following statements regarding the Constitutional & Legislative provisions related to Trafficking in India:
1. Trafficking in Human Beings or Persons is prohibited under the Constitution of India under Article 24 (1).
 2. India has ratified the SAARC Convention on Preventing and Combating Trafficking in Women and Children for Prostitution.
 3. India has not ratified the United Nations Convention on Transnational Organised Crime (UNTOC) which has as one of its Protocols related to Trafficking in Persons, particularly Women and Children.

How many of the above statements is/are **not correct**?

- (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
2. 'Operation AAHT' recently seen in the news, is related to
- (a) Relief Mission to Turkey
 - (b) Anti Narcotics Operation
 - (c) Seize control of the Siachen Glacier
 - (d) Curb human trafficking
3. With reference to the Section 375 of the Indian Penal Code, consider the following statements:
1. Consent is defined as clear, voluntary communication that the woman gives for a certain sexual act.
 2. Sexual intercourse by a man with his own wife who is above the age of 18, is also a sexual assault.

Which of the statements given above is/are correct?

- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
4. With reference to the National Commission for Women, consider the following statements:
1. It was established by an order of the President.
 2. Male members can be appointed as chairpersons of the commission.
 3. It can take suo-moto cognizance of matters related to the child marriage.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
5. Which of the following statements are correct about the Juvenile Justice Act?
1. Child Care Institutions (CCI) are recognised under Juvenile Justice Act, 2015.
 2. The Act allows institutional facilities for children to be set up by both government and Non-Government Organisations (NGOs).

3. As per law, registration of all CCI is compulsory and getting a registration is a right and not an obligation.

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

6. Which one of the following statements reflects the objective of the ULLAS mobile application which was launched recently?
- (a) Incentivising a healthy lifestyle among the youths of the country.
(b) Promoting cyber security hygiene among the citizens of the country.
(c) Incentivising participation of girls to take STEM (Science, technology, engineering, and mathematics) as a career.
(d) Promoting functional literacy, vocational skills, and many important life skills like financial literacy, legal literacy, digital literacy.

EXPLANATIONS

1. (b)

Trafficking in Human Beings or Persons is prohibited under the Constitution of India under **Article 23 (1)**. **Statement 1 is not correct.**

- India has also ratified the SAARC Convention on Preventing and Combating Trafficking in Women and Children for Prostitution. A Regional Task Force was constituted to implement the SAARC Convention. **Statement 2 is correct.**
- India has ratified the United Nations Convention on Transnational Organised Crime (UNTOC) which has as one of its Protocols Prevention, Suppression and Punishment of Trafficking in Persons, particularly Women and Children. **Statement 3 is not correct.**

2. (d)

“Operation AAHT” is an initiative of the Railway Protection Force to curb human trafficking.

As part of “Operation AAHT”, the infrastructure and intelligence network of the force could be utilised to collect, collate and analyse clues on victims, source, route, destination, popular trains used by suspects, the identity of carriers/agents, kingpins etc and shared with other law-enforcing agencies.

3. (a)

Statement 1 is correct: Section 375 of the Indian Penal Code **defines** rape as “sexual intercourse with a woman against her will, without her consent, by coercion, misrepresentation or fraud or at a time when she has been intoxicated or duped, or is of unsound mental health and in any case if she is under 18 years of age.

- Consent:** Consent is defined as **clear, voluntary communication** that the woman gives for a certain sexual act.
- Statement 2 is not correct: Exceptions to Section 375:** Sexual intercourse by a man **with his own wife who is above the age of 18, is not sexual assault.**
- Punishment:** Except in certain aggravated situations, the punishment will be **imprisonment of not less than seven years** but it may extend to imprisonment for life, and shall also be liable to fine.
 - In aggravated situations, punishment will be rigorous imprisonment for a term which shall not be less than 10 years but which may extend to imprisonment for life, and shall also be liable to fine.

4. (b)

Statement 1 is not correct: It was set up as **statutory body** in 1992 under the **National Commission for Women Act, 1990** to:

- review the Constitutional and Legal safeguards for women;
- recommend remedial legislative measures;
- facilitate redressal of grievances and
- advise the Government on all policy matters affecting women.

Statement 2 is correct: The Commission shall consist of a **Chairperson committed to the cause of women** to be nominated by the Union Government. By convention, the Chairperson of the commission has been a woman since its constitution, but **it can be a male member as a chairperson**.

Statement 3 is correct: The commission has powers to take **suo-moto cognizance** of matters relating to:

- deprivation of women's rights;
- non-implementation of laws enacted to provide protection to women and also to achieve the objective of equality and development.

It can look into issues of child marriage, dowry cases, etc.

5. (a)

Statement 1 is correct: CCI are Children's Home, Open Shelter, Observation Home, Special Home, Specialised Adoption Agency (SAA) and a Fit Facility recognised under **Juvenile Justice Act, 2015**.

Statement 2 is correct: The JJ Act allows institutional facilities for children to be set up by **both government and non-government organisations (NGOs)**.

Getting a registration is an obligation and not a right. The State Government may refuse or withhold registration in case institutions fail to meet the necessary standards as laid out in the law. **Hence, Statement 3 is not correct.**

6. (d)

ULLAS (Understanding Lifelong Learning for All in Society) will focus on **promoting functional literacy, vocational skills, and many important life skills** like financial literacy, legal literacy and digital literacy.

AGRICULTURE

1. Consider the following statements:
 1. Tomato Grand Challenge (TGC) hackathon is formulated by the Department of Consumer Affairs in collaboration with the Ministry of Agriculture & Farmers Welfare.
 2. Maximum production of Tomato is in southern and western regions 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. With reference to rice exports from India, consider the following statements:
 1. It accounts for 14% of the world's total rice exports.
 2. Rice shipment in 2022 was more than the next 4 exporters combined - Thailand, Vietnam, Pakistan and the US.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
3. Which of the following are covered under Pradhan Mantri Fasal Bima Yojana (PMFBY)?
 1. Pulses
 2. Oilseeds
 3. Horticultural cropsSelect the correct answer using the codes given below.
 - (a) 1 and 2 Only
 - (b) 2 and 3 Only
 - (c) 1 and 3 Only
 - (d) 1, 2 and 3

EXPLANATIONS

1. (b)

In News: The Centre has announced the Tomato Grand Challenge (TGC) hackathon.

Statement 1 is not correct: Tomato Grand Challenge (TGC) hackathon invites ideas on comprehensive and focused area interventions in tomato value chain - from cropping and market insights for the farmers, appropriate cultivars (OP varieties or hybrids) with higher shelf-life of the fruits for fresh market, cultivars specifically suitable for processing, value-addition through interventions

It has been formulated by the **Department of Consumer Affairs in collaboration with M/o Education (Innovation Cell).**

Statement 2 is correct: Tomato is produced almost in all the states in India, though in varying quantities.

Maximum production is in southern and western regions of India, contributing **56%-58% of all India production.**

Southern and Western regions being surplus states, feed to other markets depending on production seasons.

2. (b)

India accounts for **more than 40% of the world's rice exports. Hence, statement 1 is not correct.**

- Its rice shipment in 2022 was more than the next 4 exporters combined - Thailand, Vietnam, Pakistan and the US. **Hence, Statement 2 is correct.**
- India exported 17.86 mt of non-basmati rice in 2022, including 10.3 million tons of non-basmati white rice. India exports majorly to Iran, Iraq, UAE, Saudi Arabia, and the USA.

About Rice crop in India

- In India, rice is grown in 43.86 million ha and the productivity is about 2390 kg/ha. The highest productivity is 6710 kg per ha of China followed by Vietnam (5573 kg /ha), Indonesia (5152 kg/ha), Bangladesh (4375 kg/ha) etc.
- Rice is grown in almost all the states in the country however the major 5 states in rice production are **West Bengal, UP, Andhra Pradesh, Punjab and Tamil Nadu.** West Bengal produces 15 percent of the total quantity of rice produced in the country.

3. (d)

In News: Union Agriculture Minister and Union Minister for Earth Sciences launched several new initiatives under Pradhan Mantri Fasal Bima Yojana (PMFBY and Restructured Weather Based Crop Insurance Scheme(RWBCIS), such as YES-Tech Manual, WINDS portal and door to door enrollment app AIDE/Sahayak marking a turning point in India's crop insurance landscape. Pradhan Mantri Fasal Bima Yojana (PMFBY) provides a comprehensive insurance cover against failure of the crop thus helping in stabilising the income of the farmers.

- It was introduced in the country from the Kharif 2016 season and it covers 1) Food crops (Cereals, Millets and Pulses), 2) Oilseeds, 3) Annual Commercial / Annual Horticultural crops.
- PMFBY is an actuarial premium based scheme under which farmer has to pay maximum premium of 2% for Kharif, 1.5% for Rabi food & oilseed crops and 5% for annual commercial/ horticultural crops and remaining part of the actuarial/bidder premium is shared equally by the Centre and State Government.

MISCELLANEOUS

1. With reference to International Conference on Women in Physics (ICWIP), consider the following statements:
 1. It is organised by the International Alliance of Women (IAW).
 2. It was first held in 2002 in Japan to support women's human rights and equality.Which of the statements given above are correct?
 - (a) 1 Only
 - (b) 2 Only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
2. Consider the following statements with respect to the Scheme for Expansion and Modernization of Fire Services in the States:
 1. It is launched by the Union Ministry of Home Affairs.
 2. It is as per the recommendation of the 14th Finance Commission.
 3. The cost of the projects under the scheme will be shared 50% by the State and 50% by the Union government respectively.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 1 and 2 only
 - (c) 2 and 3 only
 - (d) 1, 2 and 3
3. With reference to the Performance Grading Index (PGI), consider the following statements:
 1. It assesses the performance of the school education system at the state/UT level.
 2. The PGI 2.0 for 2021-22 classified states/UTs into ten grades, where the highest achievable grade is Utkarsh.
 3. Chandigarh have attained Grade Utkarsh in the PGI 2.0 2021-22.How many statements given above is/are correct?
 - (a) Only one
 - (b) Only two
 - (c) All three
 - (d) None
4. With reference to the Performance Grading Index for Districts (PGI-D), consider the following statements:
 1. PGI-D grades the districts into ten grades and the highest achievable Grade is Akanshi-3.
 2. None of the districts earned Akanshi-1 in the report for 2020-21 & 2021-22.Which of the statements given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

5. The Global Report on the Food Crises (GRFC) 2023 was recently released. It is produced by which of the following?
- Food Security Information Network
 - UN Food and Agriculture Organization
 - Feed The Need Foundation
 - World food Programme
6. Consider the following statements regarding the All India Radio:
- The famous Akashvani tune was composed by Rabindranath Tagore in 1938.
 - The name Akashvani was derived from a poem of the same name by Indian Jewish refugee Walter Kauffman in 1930.
- Which of the statements given above is/are correct?
- 1 only
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
7. Which among the following statements is correct about the 'Meri Maati, Mera Desh campaign'?
- It is an awareness campaign by the government for the use of fertilizers.
 - It is a campaign for guiding people regarding building houses in hilly regions.
 - Under this campaign soil collected from different parts of the country will be used to develop a garden along the Kartavya Path in Delhi.
 - It is a recently launched campaign for educating farmers on pest control for the perishable crops.

EXPLANATIONS

1. (d)

In News: The eighth edition of the International Conference on Women in Physics (ICWIP) will be the first to be organised in India when it happens next week on July 10-14.

Statement 1 is not correct: ICWIP is an event of The International Union of Pure and Applied Physics (IUPAP).

Statement 2 is not correct: ICWIP was first held in 2002 in France, to address the gender imbalance in physics education and research worldwide.

2023 edition: The Gender in Physics Working Group of the Indian Physics Association and the Tata Institute of Fundamental Research (TIFR), Mumbai, are organising it together.

2. (a)

In News: The Union Ministry of Home Affairs, has launched a "Scheme for Expansion and Modernization of Fire Services in the States". **Statement 1 is correct.**

About the Scheme

- **Background:** The Scheme finds its origin from the **recommendation of the Fifteenth Finance Commission** which allows an allocation of **12.5 percent** of each of the National Disaster Response Fund (NDRF) and State Disaster Response Fund (SDRF) for the **Funding Window of Preparedness and Capacity Building**. **Statement 2 is not correct.**
- **Objective:** To expand and modernize Fire Services in the States.
- **Aim:** Several key initiatives are being taken to ensure '**zero death**' and **minimum loss of property** during disasters by strengthening the disaster risk reduction system in India to make it disaster resilient.

Funding: Out of the total National Disaster Response Fund (NDRF) corpus, an amount of Rs. 5,000 Crore was earmarked for priority “Expanding and Modernization of Fire Services”.

For seeking funds for the projects/proposals under the Scheme, the concerned State Governments shall have to contribute **25%** (except for the North-Eastern and Himalayan (NEH) States which shall contribute 10%) of total cost of such projects / proposals from their budgetary resources. **Hence, Statement 3 is not correct.**

3. (a)

Statement 1 is correct: The PGI for states/UTs was first released for the year **2017-18** and so far, it has been released **up to the year 2020-21**.

Objective: It assesses the **performance of the school education system** at the state/UT level by creating **an index for comprehensive analysis**.

Statements 2 and 3 are not correct: The PGI 2.0 for 2021-22 classified states/UTs into **ten grades**, where the highest achievable grade is ‘**Daksh**’, which is for state/UT scoring more than 940 points out of a total of 1,000 points. The lowest grade is ‘**Akanshi-3**’, which is for a score up to 460.

- **None** of the states/UTs has attained the highest grade, Daksh.
- Only two states/UTs, **Punjab and Chandigarh** have attained Grade Prachesta -2 (score 641-700);

4. (b)

- PGI-D report for 2018-19 and 2019-20 has been released so far; the current one is a combined report for 2020-21 & 2021-22.
- **Objective:** It assesses the **performance of the school education system** at the **District level** by creating an index for comprehensive analysis.

Statement 1 is not correct: Grades: PGI-D grades the districts into ten grades viz., **Highest achievable Grade is Daksh**, which is for Districts scoring more than 90% of the total points in that category or overall.

The lowest grade in PGI-D is called **Akanshi-3** which is for scores upto 10% of the total points.

Statement 2 is correct: None of the districts were able to earn **Daksh and Utkarsh**, in the latest report, **121 districts were graded as Ati-Uttam for 2020-21**, though this number **fell by more than half in 2021-22**, with just 51 districts making the grade.

- South Salmara-Mankachar district was the only district in Assam under **Akanshi-1** for 2021-22, while the **two grades at the bottom had no district**

5. (a)

Global Report on the Food Crises (GRFC)

- The GRFC is produced by the **Food Security Information Network** in support of the Global Network against Food Crises.
- It involves 16 partners to achieve a joint consensus-based assessment of acute food insecurity in countries.
- The report sets the global contexts preceding and during the year under assessment, particularly paying attention to the increasing phenomenon of urbanisation, and its effects on food security.

6. (d)

In News: July 23 marked the National Broadcasting Day in India.

About:

- All India Radio is India's **Public Service Broadcaster**, the **Radio vertical of Prasar Bharati** having the motto – '**Bahujan Hitaya: Bahujan Sukhaya**'.
- **Background:** The **Indian Broadcasting Company (IBC)** came into being on **July 23, 1927**.
- The famous **Akashvani** tune was composed by **Indian Jewish refugee Walter Kauffman in 1930**. Hence, **Statement 1 is not correct**.
- In 1936, the Indian State Broadcasting Service became **All India Radio (AIR)**.
- The AIR came under the purview of the Department of Information and Broadcasting in British India in 1941.
- In 1957 the **Vividh Bharati Services** started.
- All India Radio (AIR) has been officially known since **1956 as 'Akashvani'**. The name Akashvani (voice or announcement from the skies) was formally adopted by the national broadcaster in 1956.
- The name was derived from a poem of the same name by **Rabindranath Tagore in 1938**. Hence, **Statement 2 is not correct**.

7. (c)

The Union government has launched the **Meri Maati, Mera Desh** campaign.

About:

- It is envisaged as a **culminating event of the Azadi Ka Amrit Mahotsav celebration**.
- Under the campaign, soil collected from different parts of the country will be used to **develop a garden along the Kartavya Path in Delhi**.
- Events have been planned at the panchayat, village, block, urban local body, and State and national levels, respectively.
- The five-point agenda includes the installation of a **shilaphalakam** (memorial plaque), bearing the names of those who have made the supreme sacrifice.
- For this purpose, **veers** (bravehearts) include freedom fighters, defence personnel, CAPF personnel, and State Police.