

DAILY MCQs COMPILATION

with

EXPLANATIONS

April 2023

NEXT IAS

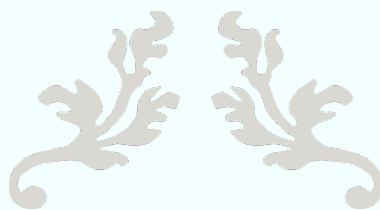


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HISTORY, ART & CULTURE

1. With reference to Jainism consider the following statements:

1. The term originates from Jina (conqueror).
2. It is supported mainly by Kshatriyas.
3. Anekantavada is one of the philosophies under it.
4. Jain Sangh consists of Sadhus, Sadhvis, Shravaks & Shravikas.

Which of the statements given above is/are correct?

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

2. With reference to the Bidriware Art consider the following statements:

1. The art form has obtained a Geographical Indications (GI) Tag.
2. The craft was developed by the Bahamani sultans who ruled Bidar in the 14th–15th centuries.

Which of the statements given above is/are correct?

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

3. With reference to the National Mission for Cultural Mapping (NMCM), consider the following statements:

1. It aims to develop a comprehensive database of art forms, and artists mainly across the rural villages in India.
2. The Scheme is administered by the Ministry of Culture in 2017.

Which of the above given statements is/are correct?

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

4. Which of the following statements are true with reference to the Mahatma Jyotiba Phule?

1. He was bestowed with the Mahatma title by Vithalrao Krishnaji Vandekar.
2. He opened an indigenous school for the lower castes especially for the Mahars and Mangs.
3. He advocated Vedas for the enlightenment of individuals.
4. He wrote Gulamgiri (Slavery) and Shetkarayacha Aasud (Cultivator's Whipcord).

Choose the correct answer using the codes given below:

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

5. Which among the following countries are considered initially to be a part of Language Friendship Bridge?

1. Uzbekistan
2. Saudi Arabia
3. Indonesia
4. Israel

Choose the correct answer using the codes given below:

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

6. What was the objective of the PEPSU Muzara movement?
- (a) To overthrow British rule in India.
 - (b) To obtain ownership rights of the land for landless peasants in PEPSU.
 - (c) To demand a separate state for the farmers of PEPSU.
 - (d) To form a political party to represent the interests of the farmers.

7. Consider the following pairs:

<i>Festival</i>	<i>State</i>
1. Rongali Bihu	Karnataka
2. Poila Baisakh	Bengal
3. Bikhoti	Uttarakhand
4. Vishu	Kerala

How many pairs given above are correctly matched?

- (a) Only one pair
 - (b) Only two pairs
 - (c) Only three pairs
 - (d) All the four pairs
8. Consider the following statements regarding The World Heritage Day:
- 1. It is also known as International Day for Monuments and Sites which is annually observed on April 18th.
 - 2. The World Heritage Day 2023 theme is "Heritage Changes".
 - 3. The theme is proposed by the International Council on Monuments and Sites (ICOMOS).

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
9. With reference to the Hakki Pikki tribal community, consider the following statements:
- 1. Hakki in Kannada means bird and Pikki means catchers.
 - 2. In Karnataka they follow Christianity as their religion.
 - 3. The society is matriarchal, where the groom gives dowry to the bride's family.

Which of the statements given above are correct?

- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
10. Consider the following statements:
- 1. Global Buddhist Summit was hosted by the Ministry of External Affairs.
 - 2. The theme of the summit was 'Responses to Contemporary Challenges: Philosophy to Praxis'.

Which of the statements given above is/are correct?

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

11. Consider the following pairs:

Handloom	State
1. Phulkari	Punjab
2. Daccai	Assam
3. Brocade	Rajasthan
4. Chanderi	Madhya Pradesh

How many pairs given above are correctly matched?

- | | |
|-----------------------|---------------------|
| (a) One of the Pair | (b) Two of the Pair |
| (c) Three of the Pair | (d) All of the Pair |

12. Consider the following Statements

1. Abhilekh Patal is a full-featured web portal to access the National Archives of India's reference media.
2. National Archives of India is an Attached Office of the Department of Telecommunications.

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)

Statement 1 is correct: **Jainism is the term originating from Jina (conqueror).**

Statement 2 is not correct: **It is supported mainly by Vaishyas (traders) in opposition to Brahmin-Kshatriya.**

Statement 3 is correct: **Philosophy under it:**

- **Anekantavada:** metaphysical/reality theory & non-absolutism/many-sidedness.
- **Syadvada:** epistemological/knowledge theory & conditional judgments

Statement 4 is correct: Jain Sangh Composition: Sadhus, Sadhvis, Shravaks & Shravikas.

2. (c)

Statement 1 is correct: Bidriware is a metal handicraft from the city of **Bidar in Karnataka**. This art form has obtained a **Geographical Indications (GI) Tag**.

Statement 2 is correct: The craft was developed by the **Bahamani sultans** who ruled **Bidar** in the **14th–15th centuries**.

3. (b)

Statement 1 is not correct: The **National Mission for Cultural Mapping (NMCM)** aims to develop a comprehensive database of art forms, artists and other resources across the country. It is aimed at addressing the necessities of preserving the threads of rich Indian Art and Cultural Heritage, converting vast and widespread cultural canvas of India into an objective Cultural Mapping while creating a strong "Cultural Vibrancy" throughout the nation.

Statement 2 is correct: The Culture Ministry had approved the mission in 2017 from 2017-18 to 2019-20. The programme was then handed over to the Indira Gandhi National Centre for Arts (IGNCA) in 2021. IGNCA was established in 1987 as an autonomous institution under the Ministry of Culture, as a centre for research, academic pursuit and dissemination in the field of the arts.

4. (c)

Statement 1 is correct: Jyotirao 'Jyotiba' Govindrao Phule was an Indian writer, social activist, thinker and anti-caste social reformer born in the Satara district of **Maharashtra in 1827**.

- He was bestowed with the honorific Mahatma title by Maharashtrian social activist Vithalrao Krishnaji Vandekar in 1888.

Statement 2 is correct: In **1851**, Jyotiba established a **girls' school** and asked his wife to teach the girls in the school. Later, he opened two more schools for the girls and an indigenous school for the lower castes, especially for the **Mahars and Mangs**.

Statement 3 is not correct: He **condemned the Vedas**, the ancient holy scriptures of the Hindus. He traced the history of Brahmanism through several other ancient texts and held the Brahmins responsible for framing the exploitative and inhuman laws in order to maintain their social superiority by suppressing the "**shudras**" and "**ati shudras**" in the society.

Statement 4 is correct: He wrote well-known books including **Gulamgiri (Slavery)** and **Shetkarayacha Aasud (Cultivator's Whipcord)**.

5. (b)

The Indian Council for Cultural Relations (ICCR) has envisaged a special project called **The Language Friendship Bridge**. India is planning to **create a pool of experts** in languages spoken in countries like **Myanmar, Sri Lanka, Uzbekistan and Indonesia** to facilitate better people-to-people exchanges.

6. (b)

The PEPSU Muzara movement started in the 1930s and went on till 1952 against Biswedari system.

- By landless peasants (muzaras) in PEPSU (Patiala and East Punjab States Union) to obtain ownership rights of the land they had been tilling for generations.
- For their hereditary property right and democratic right from the British, The native aristocracy.
- The farmers would finally receive land rights in 1952.

7. (c)

Pair 1 is not correct: Bohag Bihu: Bohag Bihu, also known as **Rongali Bihu**, is one of the most popular festivals in **Assam** and is celebrated to mark the beginning of the Assamese New Year.

- **Pair 2 is correct: Poila Baisakh:** Coinciding with the Bengali New Year, **Poila Baisakh** is celebrated with much enthusiasm by the **Bengali community** across the globe.
- **Pair 3 is correct: Bikhoti:** **Bikhoti** is celebrated grandly every year at Bairat in the Kumaon region of **Uttarakhand**. On this day, infants are treated and protected against diseases by performing various methods of acupuncture on them.
- **Pair 4 is correct: Vishu:** Vishu marks the beginning of the Malayalam New Year and falls on the first day of the Malayalam month of Medam. The festival is celebrated with much fervor across **Karnataka and Kerala** on April 14.

8. (d)

World Heritage Day, also known as the International Day for Monuments and Sites, is an annual observance held on April 18th. Hence statement 1 is correct.

- **Significance:**

- It is celebrated **to raise** awareness about the importance of cultural heritage and to celebrate the diversity of our shared human history.
- The day is dedicated to preserving human heritage and recognizing the efforts of the organisations that support it.
- The ancient buildings and monuments are an asset for us and for the world. Therefore, World Heritage Day represents **a collective effort to preserve heritage** around the world.

- **Theme:**The World Heritage Day 2023 theme is "Heritage Changes". **Hence statement 2 is correct.**

- Each year, **the International Council on Monuments and Sites (ICOMOS)** proposes a theme **for activities to be organised** by its members and partners - and anyone who wants to join in marking the day. **Hence statement 3 is correct.**
- A different theme is featured each year, and events and activities are organized around the world to promote the protection and preservation of cultural heritage.

9. (c)

Statement 1 is correct: Hakki in Kannada means '**bird**' and Pikki means '**catchers**', they are a **semi-nomadic tribe**, traditionally of bird catchers and hunters.

- They live in several states in west and south India, especially near forest areas.
- According to the 2011 census, the Hakki Pikki population in Karnataka is 11,892.
- They are believed to hail originally from the bordering districts of Gujarat and Rajasthan.
- Statement 2 is not correct: They are divided into four clans, called Gujaratia, Panwar, Kaliwala and Mewaras.
- These clans can be equated with castes in the traditional Hindu society.
- In the olden days, there was a hierarchy among the clans, with the Gujaratia at the top and the Mewaras at the bottom.
- Hakki Pikkis in Karnataka follow Hindu traditions and celebrate all Hindu festivals. They are non-vegetarians. The eldest son in a family is not supposed to cut his hair so that he can be identified easily.

Statement 3 is correct: The tribe prefers cross-cousin marriages and the usual age of marriage is **18 for women and 22 for men**. The society is **matriarchal**, where the groom gives dowry to the bride's family.

10. (b)

Statement 1 is not correct: The PM inaugurated the First Global Buddhist Summit hosted by the Ministry of Culture in collaboration with the International Buddhist Confederation.

Statement 2 is correct: Theme: "Responses to Contemporary Challenges: Philosophy to Praxis".

- **Aim:** The Summit is an effort towards engaging the global Buddhist Dhamma leadership and scholars on matters of Buddhist and universal concerns, and to come up with policy inputs to address them collectively.

11. (b)

Pair 1 and 4 are correctly matched and Pair 2 and 3 are incorrectly matched : Almost every state of India has a unique handloom product to offer such as Jacquard from Uttar Pradesh, Chanderi from Madhya Pradesh, Phulkari from Punjab, Brocade from Benaras and Dacca from West Bengal.

12. (a)

In News: The Prime Minister of India has praised “Abhilekh Patal” , a portal with over 1 Crore Pages of Historical Records of the National Archives.

Statement 1 is correct: **Abhilekh** is a **Sanskrit** term used in India for **records** since ancient times and **Patal** is a **Sanskrit** word meaning a **board, platform, or surface**.

- A combination of both these words has been adopted as an acronym for Portal for Access to Archives and Learning.
- It is a full-featured web portal to access the National Archives of India’s reference media and its digitized collections through the Internet.

Statement 2 is not correct: **The National Archives of India** is the repository of the non-current records of the Government of India and is holding them in trust for the use of record creators and general users.

- It is an Attached Office of the **Ministry of Culture**, Government of India.



Economy

1. Consider the following statements with reference to the India's Direct tax collections in FY 2022-23:
1. Personal income tax collections are higher than corporate tax collections.
 2. Corporate tax collections have grown faster than personal income tax compared to previous year.
- 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 with respect to Sagar Setu:
1. It is an App Version of National Logistics Portal (Marine).
 2. It is launched by the Ministry of Road Transport and Highways.
- 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 PM SVANidhi Scheme, consider the following statements:
1. It is a micro-credit scheme launched in 2020.
 2. It is funded by the Ministry of Micro, Small and Medium Enterprises.
 3. As per the recent data Sikkim has disbursed the maximum number of loans under the scheme.
- 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.
4. Consider the following statements:
1. Aquaculture is breeding, rearing, and harvesting of fishes and other organisms only in the freshwater environment.
 2. India is the 2nd largest fish producing nation in the world after China.
- 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 PM SVANidhi scheme, that was recently in news, is targeted for which of the following?
- (a) Women in STEM research.
(b) Upskilling of Nirman workers.
(c) Street vendors who have been affected due to the Covid-19 crisis.
(d) Treatment of leprosy infected patients.
6. Consider the following statement regarding Rashtriya Gokul Mission (RGM):
1. It is being implemented for development and conservation of hybrid and cross-breeds.
 2. The scheme is continued under the umbrella scheme Rashtriya Pashudhan Vikas yojana.
 3. It will be implemented through the State Implementing Agency (SIA).

Which of the following statements is/are correct?

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

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

1. Bank Rate 2. Public Debt
3. Open Market Operations 4. Marginal Standing Facility

Which of the above is/are component/component(s) of Monetary Policy?

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

8. With reference to the Application Supported by a Blocked Amount (ASBA), consider the following statements:

1. It facilitates investors bidding with multiple options, to apply through Self Certified Syndicate Banks (SCSBs).
2. It was first introduced by the Union Budget 2023-2024.

Which of the statements given above is/are correct ?

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

9. "Kirit Parikh panel" appointed by the government is related to which of the following?

- (a) Pricing for gas
(b) Rationalization of fertilizer subsidy
(c) Increasing protected areas on western Ghats
(d) Addressing infrastructure lacunae

10. Consider the following statements in reference to Foreign Trade Policy 2023:

1. It has been launched by the Ministry of External Affairs.
2. It aims to increase bilateral trade with the Middle East countries.
3. The schemes sanctioned under it will be time bound.

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

11. The lowering the Bank Rate by the Reserve Bank of India leads to:

- (a) Less liquidity in the market
(b) More liquidity in the market
(c) No changes in the liquidity in the market
(d) Mobilizations of more deposits by the Commercial banks

12. Consider the following statements regarding India's pharmaceutical Industry:

1. India has one third share of pharmaceuticals and drugs in the global market.
2. India's Drug and pharmaceutical exports have been rising steadily in the last 5 years.
3. Pharmexcil is a promotion body set up by the Government of India to promote the Indian pharmaceutical industry.

Which of the above given statements are correct?

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

13. Which among the following statements are **not correct** with reference to the Quality Control Orders (QCOs) for Technical Textiles?

1. The Ministry of Finance has announced the launch of QCOs.
2. QCO is the first technical regulation in India for technical textile products.
3. Technical textiles are also known as ProTech.

Select the correct answer using the code given below:

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

14. Consider the following statements regarding the Reserve Bank of India (RBI)'s framework for accepting Green Deposits.

1. The framework will be applicable to Regional Rural Banks and Local Area Banks.
2. The green deposits shall be denominated in Indian Rupees only.
3. The proceeds from green deposits will be utilised for nuclear power generation and direct waste incineration.

Which of the statements given below is/are correct?

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

15. Which of the following best describes 'Dabba trading' that was recently in the news?

- (a) It is a form of long-term trading where the investors buy stocks intending to hold onto them for some time.
- (b) It is a type of informal trading that takes place outside the purview of the stock exchanges.
- (c) A type of trading that focuses on price trend analysis.
- (d) It involves buying and selling stocks in a single day.

16. Consider the following statements:

1. Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) offers life insurance cover of Rs 5 lakh in case of death due to any reason to people in the age group of 18-60 years.
2. Pradhan Mantri Suraksha Bima Yojana (PMSBY) offers insurance coverage of Rs 4 lakh for accidental death to people in the age group of 18-50 years.

Which of the statements given above is/are correct?

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

17. Consider the following statement regarding Electronics Industry of India.

1. India is largest manufacturer of mobile phones in the world.
2. Mobile phones constitute the single largest component of electronics exports from 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

- 18.** Consider the following Statements with reference to Logistic Performance Index (LPI).
1. It is released by the World Economic Forum.
 2. India's performance has drastically improved since 2014.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 19.** European Parliament recently approved the cryptocurrency regulation "Markets in Crypto Assets (MiCA). The regulations apply to which of the following?
1. Digital assets that qualifies as transferable securities
 2. Stablecoins
 3. Non Fungible tokens (NFTs)
- Select the correct answer using the codes given below:
- (a) 1 and 2 only (b) 2 only
(c) 2 and 3 only (d) 3 only
- 20.** Consider the following statements:
1. Share of Out-of-Pocket Expenditure (OOPE) in Total Health Expenditure has declined between 2014-15 and 2019-20.
 2. Government Health Expenditure's share in the country's total GDP has increased between 2014-15 and 2019-20.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 21.** With reference to the Mahila Samman Saving Certificate Account, Consider the following statements:
1. It is a new small savings scheme launched specifically for female investors belonging to below the poverty line.
 2. The minimum investment amount is Rs 1000, and the maximum investment is Rs 2 lakh.
 3. 7.5% interest rate will be paid only after maturity without any exception.
- Which of the statements given above is/are **not** correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
- 22.** Consider the following statements with reference to the Medical Device Sector in India:
1. India is the 4th largest Asian medical devices market after Japan, China, and South Korea.
 2. It was recognized as a Sunrise Sector of India under Make in India Campaign of 2014.
 3. New Medical Devices Parks are upcoming in Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, & Tamil Nadu.
- Which of the above given statements is/are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

- 23.** India is currently facing price inflation in milk mainly due to which of the following reasons?
1. Shortage of Milk fat in the country
 2. Falling contribution of buffaloes to national milk production
 3. Taxation on Skimmed Milk Powder (SMP) & Milk Fats
 4. Increased exports of milk products
- Select the correct answer using the code given below:
- (a) 1 and 2 only (b) 1, 2 and 3 only
(c) 3 and 4 only (d) 1, 2, 3 and 4
- 24.** With reference to CGTMSE (Credit Guarantee Fund Trust for Micro and Small Enterprises), Consider the following statements:
1. CGTMSE is jointly set up by Ministry of Micro, Small & Medium Enterprises and Small Industries Development Bank of India (SIDBI)
 2. It provides Guarantee cover of up to 50 crore rupees.
- Which of the above given statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 25.** Consider the following statements:
1. The Eight Core Industries comprise more than 70 % of the weight of items included in the Index of Industrial Production (IIP).
 2. The Department for Promotion of Industry and Internal Trade (DPIIT) releases the Index of Eight Core Industries (ICI).
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 26.** National Manufacturing Innovation Survey (NMIS) 2021-22 is being released by
- (a) Ministry of MSMEs
(b) Ministry of commerce
(c) Department of Science and Technology with United Nations Industrial Development Organization (UNIDO)
(d) Department for Promotion of Industrial and Internal trade (DPIIT)
- 27.** Consider the following statements:
1. Oriental Life Insurance Company was the first life insurance company in India.
 2. Life Insurance of India Act, nationalized the insurance industry in India.
 3. India is the fifth largest life insurance market in the world's emerging insurance markets.
- Which of the statements given above are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

EXPLANATIONS

1. (d)

Statement 1 is not correct: The contribution of corporate tax collections in the gross direct tax kitty was ₹10.04 lakh crore, higher than the ₹9.61 lakh crore paid by taxpayers as personal Income Tax and Securities Transaction Tax (STT).

Statement 2 is not correct: The growth in corporate tax collections was also lower than revenues collected from personal income taxpayers, combined with STT inflows. The gross corporate tax kitty had risen 16.9% in the year, while personal income tax and STT yielded a growth of 24.23%.

2. (a)

Statement 1 is correct: The **SAGAR-SETU app** of the **National Logistics Portal (Marine)** will provide real-time information on vessel-related information, gate, container freight stations, and transactions, enabling digital transactions for payments.

Statement 2 is not correct: Union Ministry for Ports, Shipping and Waterways launched the App Version of **National Logistics Portal (Marine)** 'Sagar-Setu'.

3. (b)

Statement 1 is correct: The PM SVANidhi is a **micro-credit scheme** which was launched by the government in 2020.

Statement 2 is not correct: The scheme is funded by the **Ministry of Housing and Urban Affairs**.

Statement 3 is not correct: As per the data **Uttar Pradesh** disbursed the maximum number of loans at 11,22,397, while **Sikkim** gave out just one loan.

4. (d)

Statement 1 is not correct: Aquaculture is the breeding, rearing, and harvesting of fish, shellfish, algae, and other organisms **in all types of water environments**.

Statement 2 is not correct: India is the **3rd largest fish producing** and **2nd largest aquaculture nation** in the world after China.

5. (c)

The PM SVANidhi is a **micro-credit scheme** which was launched by the government in 2020. The scheme is funded by the Ministry of Housing and Urban Affairs.

- **Aim:** It was launched with an aim to provide credit for working capital to street vendors who have been affected due to the Covid-19 crisis.
- **Scheme highlights:**
 - PM SVANidhi facilitates **collateral-free loans of ₹10,000**, with subsequent loans of ₹20,000 and ₹50,000 with 7% interest subsidy for vendors, and rewards digital transactions.
 - All street vendors who have been in the business on or before March 24, 2020, are eligible to avail the benefits.
 - For this scheme launched in the wake of the novel coronavirus pandemic, the Centre has earmarked a stimulus package of Rs 5,000 crore for nearly 50 lakh vendors.

6. (b)

Statement 1 is incorrect: The **Rashtriya Gokul Mission (RGM)** has been implemented for development and conservation of **indigenous bovine breeds** since December 2014.

Statement 2 is correct: The scheme is also continued under the umbrella scheme **Rashtriya Pashudhan Vikas Yojana** from 2021 to 2026.

Statement 3 is correct: Rashtriya Gokul Mission is implemented through the “**State Implementing Agency**” (SIA) namely Livestock Development Boards.

7. (b)

Statement 1 is correct: Bank Rate is a rate at which the Reserve Bank is ready to buy or rediscount bills of exchange or other commercial papers. The Bank Rate acts as the penal rate charged on banks for shortfalls in meeting their reserve requirements (cash reserve ratio and statutory liquidity ratio).

Statement 2 is not correct: Public Debt and Public Revenue are part of the fiscal policy of the government.

Statement 3 is correct: Open market operations are the sale and purchase of government securities and treasury bills by the central bank of the country. The objective of OMO is to regulate the money supply in the economy.

Statement 4 is correct: Marginal Standing Facility is one of the monetary policy tools used by the RBI. It is a penal rate at which banks can borrow, on an overnight basis, from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a predefined limit.

8. (a)

In News: Recently, the Securities and Exchange Board of India (SEBI) approved a framework for an Application Supported by a Blocked Amount (ASBA)-like facility for trading in the secondary market.

Statement 1 is correct : Application Supported by a Blocked Amount (ASBA) is an application by an investor that contains an authorisation to a Self Certified Syndicate Bank (SCSB) to block in the bank account the application money for subscribing to an issue.

- An SCSB is a recognised bank capable of providing ASBA services to its customers.
- ASBA process facilitates investors bidding with multiple options, to apply through Self Certified Syndicate Banks (SCSBs), in which the investors have bank accounts.

Statement 2 is not correct_: Application Supported by a Blocked Amount (ASBA) was first introduced by SEBI in 2008.

9. (a)

Kirit Parikh panel recommendations on Gas Pricing

- Recently, the Cabinet Committee on Economic Affairs (CCEA) approved the Kirit Parikh panel recommendations on natural gas pricing.
- The panel has suggested linking the price of gas produced by state-owned firms from fields given to them on a nomination basis to imported crude oil prices.

- **Committee Mandate:**

- The committee was tasked with suggesting a "fair price to the end-consumer" while ensuring a "market-oriented, transparent and reliable pricing regime for India's long-term vision for ensuring a gas-based economy".
- The mandate was to suggest a regime that would help raise domestic production to help meet the goal of 15% of energy coming from gas by 2030.
- And at the same time, provide fair prices to consumers.

10. (a)

Statement 1 is not correct: The Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles has launched the Foreign Trade Policy 2023.

Statement 2 is not correct: The New policy has replaced the old policy that had been in place since 2015, the new policy kicks in from 2023-24 and aims to almost triple India's goods and services exports to \$2 trillion by 2030, from an estimated \$760 billion in 2022-23.

Statement 3 is correct: The new policy will have no sunset date (ending date) and will be tweaked based on the emerging world trade scenario and industry feedback. While the policy will be open-ended, the schemes sanctioned under it will be time bound.

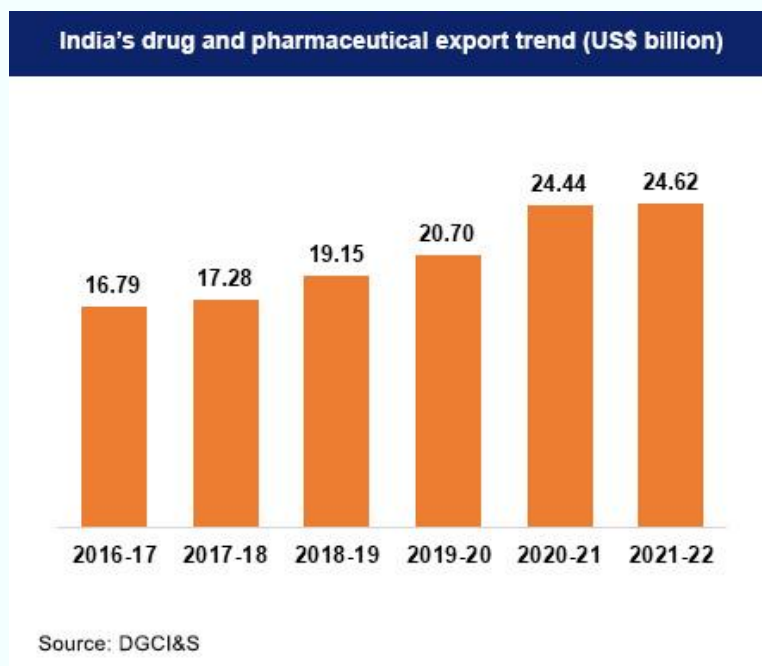
11. (b)

Bank Rate is a rate at which the Reserve Bank of India (RBI) is ready to buy or rediscount bills of exchange or the commercial papers. Lower Bank rates makes it cheaper for banks to lend from RBI and this in turn will increase liquidity in the market.

12. (b)

Statement 1 is not correct: India's share of pharmaceuticals and drugs in the global market is 5.92%.

Statement 2 is correct: India's Drug and pharmaceutical exports have been rising steadily in the last 5 years.



Statement 3 is correct: Pharmexcil is a promotion body set up by the Government of India to promote the Indian pharmaceutical industry. The roles of the council are to advise the government, organize seminars and meetings on export-related issues, organize business meetings in India and abroad and also organize trade delegations. The council also assists its members in getting Market Access Incentive (MAI) claims from the Government of India.

13. (c)

Statement 1 is not correct: The Ministry of Textiles announced the launch of 02 Quality Control Orders (QCOs) for 31 items consisting of 19 Geo Textiles and 12 Protective Textiles in the Phase-I.

Statement 2 is correct: QCO was the first technical regulation in the country for technical textile products.

- In the second phase, the Ministry plans to issue two more QCOs for 28 items that will cover 22 agro textile products and six medical textile items.
- **Statement 3 is not correct: Protective Textiles are also known as ProTech**, is a kind of technical textile.
- These textile materials are used to make protective clothing. It includes curtains and drapes, upholstered composites used for non-domestic furniture, bullet resistant jackets, and protective clothing for firefighters.
- It is used to protect human life from hazardous and adverse working conditions.

14. (b)

In News: The Reserve Bank of India (RBI) announced the framework for accepting green deposits.

- The framework will come into effect from June 1.

Statements 1 and 3 are not correct: Recent Framework is applicable to Scheduled Commercial Banks including Small Finance Banks **excluding Regional Rural Banks, Local Area Banks, and Payments Banks**, and all deposit-taking Non-Banking Financial Companies (NBFCs), including Housing Finance Companies.

- The proceeds from green deposits will be utilised for various activities like **renewable energy, energy efficiency, and clean transportation among others**.
- **Some of the sectors which are excluded are nuclear power generation, direct waste incineration, alcohol, weapons, tobacco, gaming, palm oil industries, and hydropower plants larger than 25 MW, among others.**

Statement 2 is correct: The allocation of funds raised through green deposits by REs during a financial year shall be subject to an independent Third-Party Verification/Assurance which shall be done on an annual basis.

- The green deposits shall be **denominated in Indian Rupees** only.

15. (b)

‘Dabba trading’

- Dabba (box) trading refers to **informal trading** that takes place outside the purview of the stock exchanges.
 - Traders **bet on stock price movements** without incurring a real transaction to take physical ownership of a particular stock as is done in an exchange.
- In simple words, it is gambling centred around stock price movements.

16. (d)

In News: Public sector banks (PSBs) have set a target for the sale of flagship government insurance schemes Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Pradhan Mantri Suraksha Bima Yojana (PMSBY) in FY24.

Statements 1 and 2 are not correct: Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) offers life insurance cover of **Rs 2 lakh, in case of death due to any reason**, to people in the age group of **18-50 years** having a bank or post office account, who give consent to join or enable auto-debit of premium.

- On the other hand, the PMSBY offers **insurance cover of Rs 2 lakh for accidental death** or total permanent disability and **Rs 1 lakh for partial permanent disability** to people in the **age group of 18-70 years** with a bank or post office account, who give consent to join or enable auto-debit of premium.

17. (b)

Statement 1 is not correct: India became the **second largest producer** of mobile phones with valuation of 5277 crore in FY22.

Statement 2 is correct: Mobile phones constitute the single largest component of electronics exports from India. India's mobile phone exports crossed \$10 billion in FY23.

18. (b)

Statement 1 is not correct: According to **World Bank's Logistic Performance Index (LPI) 2023**, India has climbed six places, now ranking 38th in the 139 countries index, as a result of significant investments in both soft and hard infrastructure as well as technology.

Statement 2 is correct: India's performance has drastically improved from 2014 when it was ranked 54th on the LPI.

19. (b)

MiCA regulations

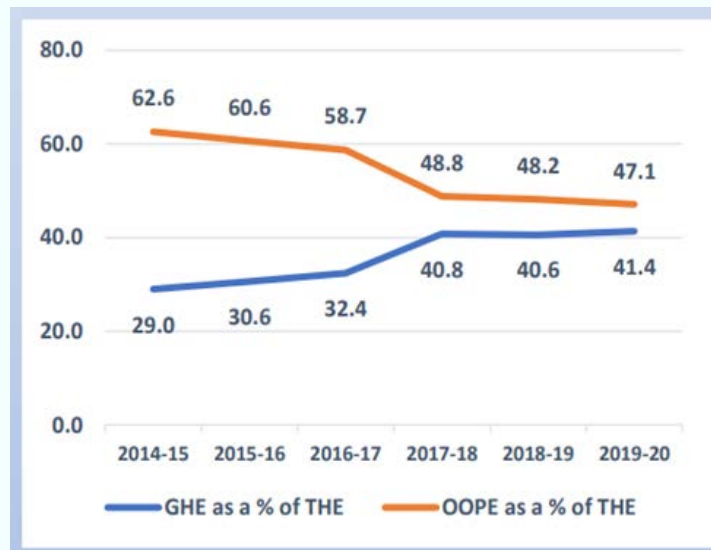
- **Cryptoassets:** The MiCA legislation will apply to 'cryptoassets', which are **broadly defined in the text** as follows:
 - "A digital representation of a value or a right that uses cryptography for security and is in the form of a coin or a token or any other digital medium which may be transferred and stored electronically, using distributed ledger technology or similar technology".
 - This definition implies that it will apply **not only to traditional cryptocurrencies** like Bitcoin and Ethereum but also to newer ones like **stablecoins**.
 - **Stablecoins:** Stablecoins are digital tokens that aim to stay pegged in value with a more stable asset - a fiat currency like the U.S. dollar or other stable cryptocurrencies.
- MiCA will establish new rules for three types of stablecoins — asset-referenced tokens, which are linked to **multiple currencies, commodities, or cryptocurrencies, e-money Tokens**, which are **linked to a single currency** and **utility tokens**, which are intended to provide access to a good or service that will be supplied by the issuer of that token. **Hence option 2 is correct.**

- **Exemptions**

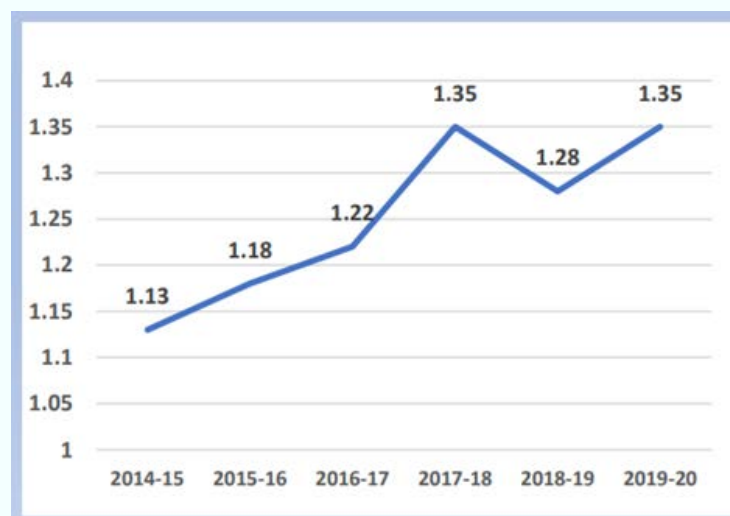
- **Transferable securities:** As for the assets that will be out of MiCA's scope, it will not regulate **digital assets that would qualify as transferable securities** and function like **shares or their equivalent** and other crypto assets that already qualify as financial instruments under existing regulation. **Hence option 1 is incorrect.**
- **Non Fungible tokens (NFTs):** It will also, for the most part, exclude non fungible tokens (NFTs). **Hence option 3 is incorrect.**
- **Central bank digital currencies & digital assets:** MiCA will also not regulate central bank digital currencies **issued by the European Central Bank** and **digital assets issued by national central banks** of EU member countries when acting in their capacity as monetary authorities, along with cryptoassets-related services offered by them.

20. (a)

Statement 1 is correct: Share of Out-of-Pocket Expenditure (OOPE) in Total Health Expenditure declines from 62.6% in 2014-15 to 47.1% in 2019-20



Statement 2 is not correct: Government Health Expenditure's share in country's total GDP decline in 2018-19.



21. (c)

Statement 1 is not correct: The Union Minister for Women and Child Development and Minority Affairs opened a Mahila Samman Savings Certificate (MSSC) account. It is a new **small savings scheme** launched **specifically for female investors** and was announced in Budget 2023 to **promote investment among women**.

- **Any woman can** open a Mahila Samman account that can be opened for herself or on behalf of a little girl.

Statement 2 is correct: Limit on minimum and maximum investment: The minimum investment amount is **Rs 1000**, and the maximum investment authorised under the plan is **Rs 2 lakh**.

- Interest rate: 7.5% annually

Statement 3 is not correct: The account holder may withdraw **up to 40%** of the balance after the first year from the date of account opening but before the account matures.

- **Premature closure of account:** The account shall not be closed before maturity except in the following cases, namely:
 - On the death of the account holder
 - On extreme compassionate ground (i) Life threatening disease of account holder (ii) death of the guardian on production of relevant documents.
 - When an account is closed prematurely, **interest on the principal amount is payable at the rate applicable to the Scheme** for which the account was held.

22. (d)

Statement 1 and 2 are correct: Medical Device Sector in India

- The current market size of the medical devices industry in India is estimated at **\$11 bn (approximately, ₹ 90,000 Cr) in 2020** and its share in the global medical device market is estimated to be **1.65%**.
- India is the **4th largest Asian medical devices market** after Japan, China, and South Korea, and among the top 20 medical devices markets globally.
- The medical devices industry in India consists of **large multinationals as well as small and medium enterprises (SMEs)** growing at an unprecedented scale.
- It was recognized as a **Sunrise Sector of India** under **Make in India Campaign of 2014**.
- **Statement 3 is correct: Steps Taken by Government of India to ensure the growth of the sector**
- **Production Linked Incentives:** Government has launched Production Linked Incentive Schemes for medical devices with financial incentives worth \$456 mn to boost domestic production.
- **Development of Medical Devices Parks:** New Medical Devices Parks are **upcoming in Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, & Tamil Nadu** to create a robust ecosystem for medical device manufacturing.
- **Policy Support:** Release of National Medical Devices Policy to enable strong collaborations for boosting medical devices ecosystem & National R&D Policy to foster interdisciplinary collaborations to develop translational skills & start-up ecosystem.

23. (d)

India's Milk price inflation

- **The issue:**

- The current price inflation in milk has mainly to do with a **shortage of fat**. Hence option 1 is correct.
- It has **led dairies to increase full-cream milk prices** more or to cut down fat content through rebranding of existing products.
- There have even been reports of **branded ghee and butter disappearing** from store shelves.

- **Possible causes:**

- **Falling contribution of buffaloes:**

■ Experts are linking this partly to the falling contribution of buffaloes to national milk production. The share of buffaloes — their milk has an average 7% fat and 9% SNF content, against 3.5% and 8.5% of cows. **Hence option 2 is correct.**

- **Demand Supply mismatch:**

■ Demand is growing for ghee, ice-cream, khoa, paneer, cheese, and other high-fat milk products.

■ But supply is coming more from crossbreds that give low-fat milk. The mismatch is pushing fat prices higher

- **Taxation:**

■ Milk doesn't attract any goods and services tax.

■ But Skimmed Milk Powder (SMP) is taxed at 5% and milk fat at 12%.

■ So, the tax incidence goes up as the fat in the reconstituted milk increases. **Hence option 3 is correct.**

- **Exports:**

- A more immediate reason for rising fat prices is exports. **Hence option is 4 correct.**
- During **2021-22, India exported over 33,000 tonnes** of ghee, butter, and anhydrous milk fat valued at Rs 1,281 crore.
- **Increased exports came** at a time when **milk production was taking a hit** from farmers **underfeeding their animals** and shrinking herd sizes due to low prices received during the **Covid lockdowns**, **escalation in fodder and livestock feed costs**, and **lumpy skin disease outbreak** among cattle.
- **The supply-side pressures** built up just when demand was returning with the lifting of lockdown restrictions and resumption of economic activity.

24. (a)

Statement 1 is correct: CGTMSE is jointly set up by Ministry of Micro, Small & Medium Enterprises (MSME), Government of India and Small Industries Development Bank of India (SIDBI) to catalyze flow of institutional credit to Micro & Small Enterprises (MSEs).

Statement 2 is not correct: Ceiling for guarantee has been raised from ₹2 crore to ₹5 crore.

25. (b)

In News: The combined Index of Eight Core Industries (ICI) increased by 3.6 percent (provisional) in March 2023 as compared to the Index of March 2022.

Statement 1 is not correct: Index of Eight Core Industries (ICI) measures combined and individual performance of the production of eight core industries viz. Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement, and Electricity.

- The Eight Core Industries **comprise 40.27 percent of the weight** of items included in the Index of Industrial Production (IIP).

Statement 2 is correct: The Office of Economic Adviser, Department for Promotion of Industry and Internal Trade (DPIIT) releases the Index of Eight Core Industries (ICI).

26. (c)

NMIS 2021-22 is a joint study by the **Department of Science and Technology (DST) and the United Nations Industrial Development Organization (UNIDO)** to evaluate the innovation performance of manufacturing firms in India.

27. (d)

Statement 1 is correct: 1818: Oriental Life Insurance Company, the first life insurance company on Indian soil started functioning.

Statement 2 is correct: About Life Insurance Corporation of India (LIC):

- It is an **Indian public sector life insurance company headquartered in Mumbai**. It is India's largest insurance company as well as the largest institutional investor.
- It was established in 1956, when the Parliament of India passed the **Life Insurance of India Act, nationalizing the insurance industry in India**.
- There are a total of **8 zonal offices**, located in Delhi, Chennai, Mumbai, Hyderabad, Kanpur, Kolkata, Bhopal and Patna
- **Statement 3 is correct: Indian Insurance Industry:**
- India is the **fifth largest life insurance market in the world's emerging insurance markets**, growing at a rate of 32-34% each year.
- The Economic Survey notes that insurance penetration in India has been steadily increasing. While this was 2.7% around 2000, this stood at 4.2% in 2020 and 2021.



Indian Polity & Constitution

1. Which of the following statements are correct regarding the Central Bureau of Investigation (CBI)?
1. It is a statutory body established under the Special Police Establishment (Amendment) Act.
 2. It is the nodal police agency in India that coordinates investigations on behalf of Interpol member countries.
 3. CBI can suo-moto take up investigation of offences anywhere in the country.
 4. The CBI is exempted from the purview of the Right to Information (RTI) Act.
- Select the correct answer using the code given below.

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

2. Consider the following pairs :

States	:	Articles
1. Mizoram	:	Article 371G
2. Manipur	:	Article 371C
3. Nagaland	:	Article 371A
4. Sikkim	:	Article 371F

How many pairs given above are correctly matched?

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

3. With reference to Preventive detention, consider the following statements:

1. It aims to prevent the detenu from doing something which is prejudicial to the State.
2. The legislative power to enact the law of preventive detention lies with the state governments only.
3. The 42nd Amendment Act of 1976 has reduced the period of detention from three to two months.

Which of the statements given above is/are correct?

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

4. Which of the following deals with the procedures mentioned in the Representation of the People Act, 1951?

1. Registration of political parties
2. Recognition of political parties as National or state parties
3. De-registration of political parties
4. Revocation of national party status

Select the correct answer using the code given below:

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

5. With reference to the Central Bureau of Narcotics consider the following statements:
1. It is a subordinate office under the Department of Revenue, Ministry of Finance.
 2. India is a signatory to the UN Convention on Narcotic Drugs 1961.
- 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 regarding Maternity Benefit (Amendment) Act, 2017.
1. It applies to the both organized and unorganized sector.
 2. It increases the paid leave from 12 weeks to 26 weeks only to biological mothers.
 3. It excludes commissioning mothers from taking maternity benefits.
- Which of the following statements is/are **not correct**?
- (a) 1 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
7. Consider the following statements:
1. Sikkim is a part of the Northeast but is not included in the Seven Sisters.
 2. 'NITI Forum for North East' constituted for solving Refugee crisis in the Northeastern Region.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
8. Consider the following statement:
1. The Hindu Marriage Act is applicable in cases where both husband and wife are Hindus, Buddhists, Jains or Sikhs.
 2. Special Marriage Act, 1954 allows people from two different religious backgrounds to come together in the bond of marriage.
 3. The Special Marriage Act is applicable to the intending spouses who are both Indian nationals living abroad.
- Which of the statements given above are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
9. Consider the following pairs:
- Disputed Region States
1. Belgaum district Karnataka-Maharashtra
 2. Parwanoo region Haryana-Himachal Pradesh
 3. Sarchu Himachal Pradesh-Uttarakhand
- How many pairs given above are correctly matched?
- (a) Only one pair (b) Only two pairs
(c) All three pairs (d) None of the pairs

10. 'SVEEP' program recently seen in the news is related to?
- (a) Initiative by Lokpal to make government departments corruption free.
 - (b) Initiative by ECI to increase voter awareness and participation in the electoral process.
 - (c) Cleanliness drive by the Central government to make the government department clean.
 - (d) None of the above
11. Consider the following statements, with reference to the Preliminary Assessment under the Juvenile Justice Act, 2015 (JJ Act, 2015):
- 1. It is to ascertain whether a juvenile can be tried as an adult.
 - 2. After the assessment as a juvenile the Board may order the transfer of the case to the Children's Court.
 - 3. As per the new guidelines Juvenile Justice Board shall be responsible for the preliminary assessment.
- 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
12. Consider the followings statements
- 1. The Panchayati Raj System was introduced in India through the 61st Amendment Act, of 1989.
 - 2. The Centrally Sponsored Scheme "SVAMITVA" aims to provide the 'Record of Rights' to village household owners possessing houses in inhabited areas.
- 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. (d)

Statement 1 is not correct: It is the main investigation agency of the central government for cases relating to corruption and major criminal probes. It is **not a statutory body** but derives its power to investigate from the **Delhi Special Police Establishment Act, 1946**.

Statement 2 is correct: It is also the **nodal police agency** in India that coordinates investigations on behalf of **Interpol member countries**.

Statement 3 is not correct: The Central Government can authorize CBI to investigate such crime in a **State only with the consent of the concerned State Government**. The Supreme Court and High Courts, however, can order CBI to investigate such a crime anywhere in the country without the consent of the State. CBI can suo-moto take up investigation of offenses only in the Union Territories.

Statement 4 is correct: CBI is exempt from the provisions of the **RTI Act of 2005**.

2. (d)

SDF supremo claimed that the Sikkimese people feel betrayed as Article 371F was “violated”.

All four pairs are correctly matched

- **Article 371F: Sikkim** finally opted to become a full-fledged 22nd State of the Indian Union with effect from 26 April 1975 vide the Constitution 36th Amendment Act 1975 with special provision laid for the State under article 371(F) of the Constitution of India.
- **Article 371C** deals with special provisions with respect to **Manipur** which became a State in 1972.
- **Article 371(A)** states that no act of Parliament shall apply to the State of **Nagaland** in respect of the religious or social practices of the Nagas, its customary law, and procedure, administration of civil and criminal justice involving decisions according to Naga customary law and ownership and transfer of land and its resources.
 - It shall apply to Nagaland only after the State Assembly passes a resolution to do so.
- **Article 371-G** which deals with special provisions with respect to **Mizoram** has similar nature.

3. (b)

In News: The Supreme Court observed in a judgment that preventive detention laws in India are a colonial legacy and confer arbitrary power to the state.

Statement 1 is correct: **Preventive detention** means the detention of a person without trial. It refers to the detention at the will of the executive.

- The objective of **preventive detention** is to prevent a person from doing something, and the detention in this case takes place on the apprehension that he or she is going to do **something prejudicial to the security of the State, public order, maintenance of supplies and services essential** to the community, defence, foreign affairs or security of India.

Statements 2 and 3 are not correct: The legislative power to enact the law of preventive detention is divided by the Constitution between the Union and the State.

- The 44th Amendment Act of 1978 has reduced the period of detention without obtaining the opinion of an **advisory board from three to two months**. However, this provision has not yet been brought into force, hence, the original period of three months still continues.

4. (b)

Registration of Political parties

- Political Parties registrations are governed by the provisions of the Representation of the People Act, 1951. Hence option 1 is correct.
- There is no procedure available for the de-registration of dormant political parties. Hence option 3 is incorrect.

Recognition or revocation of a party as a

- The ECI has laid down the technical criterion for a party to be recognised as a national party.
- A party may gain or lose national party status from time to time, depending on the fulfilment of the laid-down conditions in the ECI's Political Parties and Election Symbols, 2019 handbook. Hence options 2 and 4 are incorrect.

5. (c)

The Revenue secretary launched the unified portal of the Central Bureau of Narcotics.

Both Statement 1 and 2 are correct: Central Bureau of Narcotics is a subordinate office under the Department of Revenue, Ministry of Finance. It is headquartered at Gwalior.

- It works under the ambit of various **United Nations Conventions and the provisions of NDPS Act, 1985.**
- India is a **signatory to the UN Convention on Narcotic Drugs 1961, UN Convention on Psychotropic Substances 1971** and UN Convention against the Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988 which obligates member countries to monitor the implementation of the United Nations drug control conventions.

6. (c)

Statement 1 is incorrect: It **does not** apply to the unorganized sector.

- **Statement 2 is correct:** The Maternity Benefit (Amendment) Act, 2017 amended Section 5 of the erstwhile Act to allow **26 weeks of paid leave** after childbirth, although only to biological mothers.
- **Statement 3 is incorrect:** commissioning mother shall be entitled to maternity benefit for a period of **twelve weeks** from the date the child is handed over to the adopting mother or the commissioning mother, as the case may be.

7. (a)

Statement 1 is correct: The Seven Sister States is a popular term for the contiguous states of Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland and Tripura. Sikkim belongs to the group of northeastern states but doesn't belong to Seven Sisters State.

Statement 2 is not correct: The 'NITI Forum for North East' constituted for accelerated, inclusive and sustainable development in the North East Region has identified 5 focus sectors, viz. Tea, Tourism, Bamboo, Dairy and Pisciculture.

8. (d)

Statement 1 is correct: The Hindu Marriage Act is applicable in cases where **both husband and wife are Hindus, Buddhists, Jains or Sikhs** or where they have converted into any of these religions.

Statement 2 is correct: Where either of the husband or wife or both are not Hindus, Buddhists, Jains or Sikhs the marriage is registered under the Special Marriage Act, 1954.

Statement 3 is correct: Special Marriage Act is applicable to the entire territory of India and extends to intending spouses who are both Indian nationals living abroad.

9. (b)

Pair 1 is correct: The dispute between Karnataka and Maharashtra is over the Belgaum district.

Pair 2 is correct: Parwanoo region is disputed area between Haryana and Himachal Pradesh.

Pair 3 is not correct: Sarchu is disputed area between Himachal Pradesh and Ladakh.

10. (b)

Systematic Voters' Education and Electoral Participation (SVEEP)

- It is the flagship program of the Election Commission of India (ECI).
- It is a programme of multi-interventions through different modes and media designed to educate citizens, electors and voters about the electoral process in order **to increase their awareness and participation in the electoral processes.**
- It is designed according to the socio-economic, cultural and demographic profile of the states as well as the history of electoral participation in previous rounds of elections and learning thereof.

11. (c)

Statement 1 is correct: The preliminary assessment is to ascertain whether a **juvenile can be tried as an adult.** Replacing the Juvenile Justice Act, 2000, the 2015 Act, for the first time, provided for trying **juveniles in the age group of 16-18 as adults** in cases of **heinous offences.**

Statement 2 is not correct: **Section 15 of the JJ Act** provides that in case of a heinous offence alleged to have been committed by a child, who has completed or is above the age of sixteen years, the Board shall conduct a preliminary assessment regarding his **mental and physical capacity to commit such offence,** ability to understand the consequences of the offence and the **circumstances** in which he allegedly committed the offence.

- Section 18 (3) of the Act further suggests that, if the Board, after preliminary assessment under section 15 passes an order that there is a need for trial of the said child as an adult, then the Board may order the transfer of the case to the Children's Court having jurisdiction to try such offences.

Statement 3 is correct: As per the new guidelines under the act **JJB shall be responsible for the preliminary assessment** and provide the child, the child's family, and their counsel a copy of the order.

12. (d)

In News: The Ministry of Panchayati Raj in collaboration with the Government of Madhya Pradesh commemorated National Panchayati Raj Day (NPRD).

Statement 1 is not correct: The Panchayati Raj System is a decentralized system of governance in India, where local bodies or Gram Panchayats are given the power to govern themselves and make decisions for the development of their respective areas.

- This system was introduced in **1993 by the 73rd Constitutional Amendment Act**, which aimed at bringing democracy at the grassroots level and empowering people in rural areas.

Statement 2 is not correct: The **Central Sector Scheme "SVAMITVA"** aims to provide the 'Record of Rights' to village household owners possessing houses in inhabited areas (Abadi) in villages. Under the scheme, land parcels in a rural inhabited area of all the villages of the country are surveyed. It helps in the determination of clear ownership of property.

The scheme is being implemented with the collaborative efforts of the Ministry of Panchayati Raj, Survey of India (SoI), State Revenue Department, State Panchayati Raj Department, and National Informatics Centre.



Geography

1. Which of the following rivers are left bank tributaries of Kaveri river?
- | | |
|-------------|---------------------|
| 1. Hemavati | 2. Lakshmana Tirtha |
| 3. Bhavani | 4. Shimsha |
| 5. Arkavati | |
- (a) 1,2 and 4 only (b) 2,3 and 4 only
(c) 1, 4 and 5 only (d) 1,2,3,4 only
2. Consider the following statements:
1. During El Nino trade winds are stronger than usual.
 2. As a result of La Niña events, cold water is pushed towards Asia.
 3. La Niña is also sometimes called a cold event.
- Which of the statements given above is/are correct?
- (a) 1 and 3 only (b) 2 only
(c) 3 only (d) 1, 2 and 3
3. Consider the following statement regarding the Flash drought:
1. It is a considerably long dry spell with significantly low precipitation.
 2. Flash droughts can occur in the monsoon season as well.
 3. Flash droughts could occur in weeks and stay on for months.
- Which of the following statements is/are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 2 only (d) 1, 2 and 3
4. 'Darfur region' sometimes seen in news is related to?
- (a) Middle east (b) Indonesian Island
(c) Central Africa (d) Central Asia
5. In which of the following places will zero shadow day occur first during Uttarayan?
- (a) Bengaluru (b) Hampi
(c) Hyderabad (d) Nagpur
6. Consider the following statements:
1. The majority of indigenous people live in the African continent.
 2. China is the country with the biggest indigenous population in absolute terms.
- Which of the above given statements is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
7. Which of the following can be the possible consequences of Rise in Sea-level?
1. Increase in Frequency of cyclones
 2. Increase in Incidences of marine heat waves
 3. Changes in coastal ecosystems
 4. Uneven rainfall

Choose the correct answer using the codes given below

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

8. With reference to BHARAT TAP, Consider the following statements:

1. It is a collaborative effort which was formulated under AMRUT 2.0.
2. It will provide low-flow, sanitary-ware at scale, and thereby reduce water consumption at source considerably.

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)

The Kaveri River rises at Talakaveri in the Brahmagiri range in the Western Ghats, Kodagu district of the state of Karnataka,

- Some of the important left bank tributaries are Harangi, Hemavati, Shimsha, Arkavati, Sarabanga, Thirumanimutharu
- Some of the important Right bank tributaries are Lakshmana Tirtha, Kabini, Bhavani, Noyyal, Amaravati, Moyar

2. (c)

Statement 1 is not correct: During El Niño, **trade winds weaken**. Warm water is pushed back east, toward the west coast of the Americas and as a result **cold water is pushed towards Asia**.

Statement 2 is not correct: La Niña has the opposite effect of El Niño. During La Niña events, **trade winds** are even **stronger than usual**, pushing more **warm water toward Asia**.

Statement 3 is correct: It means **Little Girl** in Spanish. La Niña is also sometimes called El Viejo, anti-El Niño, or simply "a cold event."

3. (d)

Statement 1 is correct: A considerably long dry spell with significantly low precipitation anomalies during the monsoon results in an increase in air temperature. Increased air temperature and precipitation deficit together cause a rapid depletion of soil moisture leading to flash drought.

Statement 2 is correct: Flash droughts can occur in the monsoon season as well, primarily caused by the monsoon breaks and these can also occur due to delayed onset of the summer.

Statement 3 is correct: Flash droughts can occur in the monsoon season as well, primarily caused by the monsoon breaks and these can also occur due to delayed onset of the summer.

4. (c)

Darfur is a region of western Sudan. Darfur covers an area of 493,180 square kilometers, approximately the size of mainland Spain.

- Most of the region consists of a semi-arid plain and thus appears unsuitable for developing a large and complex civilization.



5. (a)

A zero shadow day (ZSD) is a day on which the Sun does not cast a shadow of an object at noon, when the sun will be exactly at the zenith position (highest point in the sky).

- ZSD happens twice a year for locations in the tropics (between the Tropic of Cancer at +23.5 degrees of latitude and the Tropic of Capricorn at -23.5 degrees of latitude). So, places north of Ranchi in India do not have Zero shadow day.
- Bengaluru is the southernmost of the above cities, So, during the northward movement of the Sun, **Bengaluru will get zero shadow day first.**

6. (b)

Statement 1 is not correct: Indigenous peoples are often marginalized and face discrimination in countries' legal systems, leaving them even more vulnerable to violence and abuse. There are 476 million Indigenous people around the world and spread across more than 90 countries. **The vast majority of them – 70% – live in Asia.**

Statement 2 is correct: China is the country with the biggest indigenous population in absolute terms. More than 125 million indigenous people – Tibetans, Uyghurs, Zhuang and 52 other recognized groups – still make up only 8.9 percent of the Chinese population. India has 104 million indigenous people (8.6 percent of the population).

7. (d)

The 'State of the Global Climate 2022' report released by WMO highlighted that sea level is rising at an unprecedented rate.

Statement 1 is correct: The chances of cyclones could increase, affecting coastal communities and leading to large economic liabilities for tropical countries like India and South Africa.

Statement 2 is correct: Ocean Heat content (OHC) in 2022 touched a new record high. Around 90% of the energy trapped in the climate system by greenhouse gases goes into the ocean.

- In 2022, 58 percent of the ocean surface suffered at least one marine heatwave event and 25 per cent of the surface experienced at least one marine cold spell.

Statement 3 is correct: coastal ecosystems could be “completely changed”. In the Sundarbans delta in West Bengal, rising sea levels and coastal erosion has forced members of local communities to migrate.

Statement 4 is correct: Record breaking rain: For instance, extensive flooding in Pakistan.

8. (c)

Statement 1 is correct: Bharat Tap is a collaborative effort which was formulated under AMRUT 2.0.

Statement 2 is correct: It will provide low-flow, sanitary-ware at scale, and thereby reduce water consumption at source considerably.



Government Schemes/ Initiatives

1. Consider the following statements with reference to Integrated Child Development Services Program:
1. The scheme is under the Ministry of Women and Child Development.
 2. It is a major national program that addresses the needs of children under the age of three years.
 3. It is a Centrally-Sponsored scheme.
 4. It provide six services to the beneficiaries including Non-Formal Education for Children in Pre-School.

Which of the statements given above are correct?

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

2. Consider the following statements in reference to Pradhan Mantri Swasthya Suraksha Yojana (PMSSY):
1. It aims to correct regional imbalances in the availability of affordable tertiary healthcare services
 2. The Expenditure for the scheme is wholly borne by the centre.

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. Regarding National Curriculum Framework for School Education(NCF), consider the following statements:

1. It is developed based on the vision of the National Education Policy (NEP) 2020.
2. It addresses education for the age group 6 to 18 years.
3. The National Steering Committee under the chairmanship of Raghuram Rajan was set up to undertake NCFs.

Which of the statements given above is/are correct?

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

4. Consider the following statements regarding 'Vibrant Village Programme'.

1. It is a central sector village development scheme.
2. Vibrant Village Action Plans will be created by the district administration.

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. India's first water bodies census was recently concluded. Which of the following water bodies were a part of the census?

1. Rivers, streams, springs, waterfalls, canals, etc. which are free flowing.
2. Tank, reservoirs, ponds, etc.
3. A structure where water from ice-melt, streams, springs & rain is accumulated.
4. Pucca open water tanks created only for cattle to drink water.

Select the correct answer using the codes given below:

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

EXPLANATIONS

1. (b)

Statement 1 is correct: The scheme primarily runs through the Anganwadi centre. The scheme is under the Ministry of Women and Child Development.

Statement 2 is not correct: It addresses the needs of children under the age of **six years**.

Statement 3 is correct: Integrated Child Development Services is Centrally-Sponsored scheme.

Statement 4 is correct: It provide the following six services to the beneficiaries:

- Supplementary Nutrition (SNP)
- Health & Nutrition Check-Up
- Immunization
- Non-Formal Education for Children in Pre-School
- Health and Nutrition Education
- Referral services

2. (a)

Statement 1 is correct: PMSSY was announced in 2003 with objectives of correcting regional imbalances in the availability of affordable/ reliable tertiary healthcare services and also to augment facilities for quality medical education in the country.

- The PMSSY is implemented by the Ministry of Health and Family Welfare.

Statement 2 is not correct: PMSSY has Two components:

- Setting up of AIIMS like institutions.
- Upgradation of government medical colleges in various states.
 - The project cost for upgradation of each medical college institution is shared by the Centre and the state.

3. (b)

In News : The Ministry of Education released a pre-draft version of the National Curriculum Framework for School Education.

Statement 1 is correct : The National Curriculum Framework for School Education (NCF) is developed based on the vision of the **National Education Policy (NEP) 2020**, and to enable its implementation.

Statements 2 and 3 are not correct : National Curriculum Framework for School Education (NCF) addresses education for the **age group 3 to 18 years**, across the entire range of diverse institutions in India.

- This is across the four Stages in the 5+3+3+4 Curricular and Pedagogical restructuring of School Education as envisioned in NEP 2020.

The National Steering Committee under the chairmanship of **K. Kasturirangan** was set up by the Ministry to undertake and develop NCFs.

4. (b)

Statement 1 is incorrect: It is a centrally sponsored village development scheme.

Statement 2 is correct: Vibrant Village Action Plans will be created by the district administration with the help of Gram Panchayats.

5. (b)

What consists of “Water Bodies”?

- First Census Report considers “**all natural or man-made** units **bounded on all sides** with some or no masonry work used for storing water for irrigation or other purposes (e.g. industrial, pisciculture, domestic/ drinking, recreation, religious, ground water recharge etc.)” as water bodies.
 - According to the census, the water bodies “are **usually of various types** known by different names like **tank, reservoirs, ponds** etc.”. Hence option 2 is correct.
 - A structure where **water from ice-melt, streams, springs, rain or drainage** of water from residential or other areas is accumulated or water is stored by diversion from a stream, nala or river will also be treated as water body. Hence option 3 is correct.
- **Excluded Water Bodies**
- Seven specific types of water bodies were excluded from the count. They were:
 - Oceans and lagoons;
 - Rivers, streams, springs, waterfalls, canals, etc. which are free flowing, without any bounded storage of water; Hence option 1 is not correct.
 - Swimming pools;
 - Covered water tanks created for a specific purpose by a family or household for their own consumption;
 - A water tank constructed by a factory owner for consumption of water as raw material or consumable;
 - Temporary water bodies created by digging for mining, brick kilns, and construction activities, which may get filled during the rainy season; and
 - Pucca open water tanks created only for cattle to drink water. Hence option 4 is not correct.



Defense / Internal Security

1. With reference to Indian Computer Emergency Response Team (CERT-in) consider the following statements:
1. It is an office within the Union Ministry of Electronics and Information established under IT Act 2000.
 2. It is a nodal agency to deal with cyber security threats.
- 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 Indian bilateral Military Exercises:
1. Indonesia – SHAKTI
 2. Japan – DHARMA Guardian
 3. Uzbekistan – PRABAL DOSTYK
- Which of the pairs given above is/are correctly matched?
- (a) 1 and 2 (b) 2 only
(c) 1 and 3 (d) 3 only
3. Consider the following statement regarding the National Crime Record Bureau (NCRB):
1. It was set up as a repository of information on crime and criminals under the ambit of the Ministry of Law and justice.
 2. It was established on the recommendations of the Tandon Committee.
 3. NCRB has also been designated as the Central Nodal Agency to manage technical and operational functions of the Online Cyber-Crime Reporting Portal.
- Which of the following statements is/are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 2 only (d) 1, 2 and 3
4. Which of the following statements regarding the Global Terrorism Index (GTI) is **not correct**?
- (a) It is a comprehensive study that covers 99.7 percent of the world's population.
 - (b) It is produced by the Institute for Economics & Peace (IEP).
 - (c) It produces a composite score so as to provide an ordinal ranking of countries on the impact of terrorism.
 - (d) None of the above
5. Consider the following statements
1. Maoist violence in India has increased by 77% since 2010.
 2. The Greyhounds force was formed in 1989 to combat the growing Maoist threat in Madhya Pradesh.
- 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

6. The bilateral defense Exercise Ajeya Warrior is conducted between India and which of the following nations?
- (a) Bangladesh (b) France
(c) United Kingdom (d) Indonesia
7. Recently launched Preparedness and Resilience for Emerging Threats (PRET) Initiative is targeted towards which of the following?
- (a) Cyber threats (b) Terrorism
(c) Climate change (d) Future pandemics
8. Which of the following evacuation Operations of the Government of India is associated with rescuing its citizens from Sudan?
- (a) Operation Kaveri (b) Operation Devi Shakti
(c) Operation Ganga (d) Operation Maitri

EXPLANATIONS

1. (c)

Statement 1 is correct: CERT-in is an office within the Union Ministry of Electronics and Information Technology (MeitY) established in **2004 under the IT Act 2000**.

Statement 2 is correct: It is the nodal agency to

- Deal with cyber security threats.
- Strengthen the security-related defence of the Indian Internet domain.
- Coordinate with public and private organisations in India when cyber incidents like data breaches and ransomware attacks are reported.
- Issue advisories for software vulnerabilities as guidance for organisations.

2. (b)

Pair 1 is not correct: Shakti is a bilateral Army exercise between India and France.

Pair 2 is correct: DHARMA Guardian is a bilateral Army exercise between India and Japan.

- **Pair 3 is not correct:** PRABAL DOSTYK is a bilateral Army exercise between India and Kazakhstan.

3. (b)

Statement 1 is not correct: It was set up in **1986** to function as a **repository of information on crime and criminals** under the ambit of the Ministry of Home Affairs.

Statement 2 is correct: It was established on the **recommendations of the Tandon Committee** to the **National Police Commission (1977-1981)** and the **MHA's Taskforce (1985)**.

Statement 3 is correct: NCRB has also been designated as the Central Nodal Agency to manage technical and operational functions of the **Online Cyber-Crime Reporting Portal**.

4. (d)

Global Terrorism Index (GTI)

- **About:**

- The Global Terrorism Index (GTI) is a comprehensive study analysing the impact of terrorism for 163 countries covering 99.7 percent of the world's population. Hence statement (a) is correct.
- The GTI report is produced by the Institute for Economics & Peace (IEP) using data from Terrorism Tracker and other sources. Hence statement (b) is correct.

- **GTI Score:**

- The GTI produces a composite score so as to provide an ordinal **ranking of countries** on the impact of terrorism. **Hence statement (c) is correct.**

- The GTI scores each country on a **scale from 0 to 10**;

Where **0 represents no impact** from terrorism and 10 represents the highest measurable impact of terrorism.

- The GTI considers deaths, incidents, hostages and injuries from terrorism.

- **Aim:**

- Given the significant resources committed to counter terrorism by governments across the world, it is important **to analyse and aggregate the available data** to better understand its various properties.

- One of the key aims of the GTI is **to examine these trends.**

- It also aims to help inform a positive, practical debate about the future of terrorism and the required policy responses.

5. (c)

In News: Ten personnel of the Chhattisgarh Police's District Reserve Guard (DRG) were reported killed in an IED attack by Maoists in the state's Dantewada district.

Statements 1 and 2 are not correct: According to the government, Maoist violence in the country has **gone down by 77% since 2010.**

- The number of resultant deaths (security forces + civilians) has come down by 90 % from the all-time high of 1,005 in 2010 to 98 in 2022
- The Greyhounds force was formed in 1989 by K.S. Vyas, an IPS officer, to combat the growing Maoist threat in **Andhra Pradesh**. The Maoist movement in the State began with the Srikakulam uprising in 1967.

6. (c)

In News: The 7th edition of the joint military exercise "AJEYA WARRIOR-23" between India and the United Kingdom is being conducted at Salisbury Plains, United Kingdom from 27 April to 11 May 2023.

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

7. (d)

- **PRET Initiative**
 - The initiative was announced at the Global Meeting for Future Respiratory Pathogen Pandemics held in Geneva, Switzerland.
- **Aim:**
 - The **Preparedness and Resilience for Emerging Threats (PRET) Initiative** is aimed at providing “guidance on integrated planning for responding to any respiratory pathogen such as influenza or coronaviruses”.
- **Immediate focus of the mission:**
 - While the current focus of PRET will be on respiratory viruses — in the backdrop of the SARS-CoV-2 outbreak.
 - Possible threat of an avian influenza outbreak work is already underway to assess what should be the next group of pathogens to be mitigated under this initiative.

8. (a)

- **Operation Kaveri:**
 - Under Operation Kaveri, India has been rescuing its citizens in buses from **conflict zones in Khartoum** and other **troubled areas to Port Sudan** from where they are being taken to **Jeddah** in Indian **Air Force’s transport aircraft** and **Indian Navy’s ships**.
 - From Jeddah, the Indians are being brought home in either commercial flights or IAF’s aircraft.
- **Operation Maitri (2015):**
 - Operation Maitri (Operation Amity) was launched by the Indian government and armed forces as a rescue and relief operation in Nepal.
 - It was conducted following the devastating **earthquake that struck the country** in April 2015.
- **Operation Devi Shakti (2021):**
 - Operation Devi Shakti (Operation Goddess Shakti) was an operation of the **Indian Armed Forces** to evacuate Indian citizens and foreign nationals **from Afghanistan** after the **collapse of the Islamic Republic of Afghanistan** and the fall of Kabul, the capital city, to the Taliban.
- **Operation Ganga (2022):**
 - Operation Ganga was an evacuation mission carried out by the **Indian government** to rescue its citizens stranded in neighboring countries during the **2022 Russian invasion of Ukraine**.
 - The citizens were transported from Romania, Hungary, Poland, Moldova, and Slovakia to India with assistance from these countries.

■ ■ ■ ■

International Relations

1. Which of the following countries are members of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) ?
- | | |
|--------------|----------------|
| 1. Chile | 2. New Zealand |
| 3. Singapore | 4. Indonesia |
| 5. Japan | |
- (a) 1, 2 and 4 only (b) 2, 3 and 4 only
(c) 1, 2, 3 and 5 only (d) 1, 2, 3, 4, and 5
2. Consider the following statements:
1. Metal exports are top exports from India to Malaysia.
 2. Malaysia is the largest trading partner of India in the ASEAN.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
3. Consider the following statements:
1. Genocide Convention is an instrument of international law that codified the crime of genocide for the first time.
 2. India is a signatory to the 1951 UN Convention relating to the Status of Refugees.
- 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 of the following statements is/are correct with respect to the Organisation of the Islamic Cooperation (OIC)?
1. It is the world's largest multilateral body.
 2. It was established by the First Islamic Summit Conference in 1969.
- Choose the correct answer using the codes given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
5. Which of the following statements are correct with reference to the United Nations Statistical Commission?
1. It is the highest body of the global statistical system.
 2. The member countries of the commission are elected by the UN Trusteeship Council.
 3. It oversees the work of the United Nations Statistics Division (UNSD).
- Choose 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

6. Consider the following statements regarding the North Atlantic Treaty Organization (NATO):
1. The key purpose of NATO's formation was to create a "collective defence".
 2. New members are admitted with the consent of a majority of 2/3rd members present and voting.
 3. Sweden recently became the 35th member of NATO.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 1 and 2 only
(c) 1 and 3 only (d) 2 and 3 only
7. Consider the following statement regarding Shanghai Cooperation Organization (SCO).
1. It is a political, economic and defence organization.
 2. It comprises 40% of the world population, and more than 30% of global GDP.
 3. India was a founding member of SCO.
- Which of the following statements is/are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) All of the above
8. Consider the following statements regarding 'The doctrine of promissory estoppel':
1. It is a concept developed in contractual laws.
 2. A claim of doctrine of promissory estoppel essentially prevents a "promisor" from backing out of an agreement on the grounds that there is no "consideration".
 3. This doctrine does not exist in India's law books.
- 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
9. Which of the following are the hydropower projects between India & Nepal?
1. Mangdechhu hydroelectric project
 2. Seti project
 3. Tipaimukh Hydro-Electric (Multipurpose) Project
 4. Arun III project
- Select the correct answer using the code given below:
- (a) 1 and 3 only (b) 2, 3 and 4 only
(c) 2 and 4 only (d) 1, 2, 3 and 4
10. Consider the following statement regarding Group of Seven (G7).
1. The member countries together represent 70% of global GDP and 30% of world's population.
 2. Unlike other bodies such as NATO, the G7 has no legal existence, permanent secretariat or official members.
 3. It traces its origin to the oil crisis of 1973.
- Which of the following statements are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

11. Consider the following statements with reference to International Atomic Energy Agency (IAEA):
1. It reports to the UN General Assembly only.
 2. It is entrusted with the task of upholding the principles of the Nuclear Non-Proliferation Treaty.
 3. It only deals with the civil nuclear programmes of the sovereign states.
- 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
12. 'State of World Population Report' is published by which of the following?
- (a) Commission for the Observance of World Population
(b) United Nations Department of Economic and Social Affairs
(c) United Nations Population Fund (UNFPA)
(d) Population Information Network (POPIN)
13. Consider the following statements:
1. The World Gold Council is a nonprofit association of the world's leading gold producers.
 2. India's gold imports contribute to the second largest part of the import bill after oil.
 3. Golden Dawn Operation is an INTERPOL initiative to prevent the smuggling of Gold worldwide.
- Which of the above given statements is/are correct?
- (a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3

EXPLANATIONS

1. (c)
Option c is correct : Comprehensive and Progressive Agreement for Trans-Pacific Partnership is an 11-nation Indo-Pacific free-trade bloc, which includes Australia, Japan, Canada, Brunei, Chile, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam.
2. (d)
Statement 1 is not correct: In 2021, India exported \$6.63B to Malaysia. The main products that India exported to Malaysia are Refined Petroleum (\$1.8B), Frozen Bovine Meat (\$420M), and Raw Aluminium (\$362M).
Statement 2 is not correct: Malaysia(\$19.4 billion) is the third largest trading partner of India in the ASEAN region, after Singapore and Indonesia that account for \$30.1 billion and \$26.1 billion bilateral trade with India respectively.
3. (a)
In News: the International Court of Justice at The Hague rejected the Myanmar junta's appeal for a 10-month reprieve to file a counter-memorial — or reply — to The Gambia's case that Myanmar was in breach of the international Genocide Convention.

Statement 1 is correct: The Convention on the Prevention and Punishment of the Crime of Genocide (Genocide Convention) is an **instrument of international law that codified for the first time the crime of genocide**.

- It was the first human rights treaty adopted by the General Assembly of the United Nations in 1948 and signified the international community's commitment to 'never again' after the atrocities committed during the Second World War.

Statement 2 is not correct: India is not a signatory to the 1951 UN Convention relating to the Status of Refugees and the 1967 Protocol.

- All foreign undocumented nationals are governed as per the provisions of The Foreigners Act, of 1946, The Registration of Foreigners Act, of 1939, The Passport (Entry into India) Act, of 1920, and The Citizenship Act, of 1955.

4. (b)

Statement 1 is not correct: The Organisation of the Islamic Cooperation is the **world's second-largest multilateral** body after the UN.

Statement 2 is correct: It was established by the First Islamic Summit Conference held in Morocco in September 1969.

5. (c)

Statement 1 is correct: The United Nations Statistical Commission was established in **1947** and is the highest body of the global statistical system.

Statement 2 is not correct: The Commission consists of **24 member countries** of the United Nations elected by the **United Nations Economic and Social Council** on the basis of an **equitable geographical distribution**.

Statement 3 is correct: The Statistical Commission oversees the work of the **United Nations Statistics Division (UNSD)**, and it is a **Functional Commission of the UN Economic and Social Council**.

6. (a)

- At present, NATO has 31 member countries. In 1949, there were 12 founding members of the Alliance: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States. Since then, 19 more countries have joined the Alliance: Greece and Türkiye (1952); Germany (1955); Spain (1982); Czechia, Hungary and Poland (1999); Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004); Albania and Croatia (2009); Montenegro (2017); North Macedonia (2020); and Finland (2023).
- The key purpose of NATO's formation was to create a **"collective defence"** against any potential German or Soviet Union attack in the **aftermath of World War II**.
- Article 5: If a NATO member attacks another member, it is considered 'an attack on all NATO members, according to Article 5 of NATO. **Hence statement 1 is correct.**
- **Membership of NATO**: It is open to all European nations that fulfil certain criteria. New members are admitted with the unanimous consent of all members. **Hence statement 2 is not correct.**
- **Finland and Sweden's application for NATO membership**: Finland and its neighbour Sweden applied for NATO membership soon after the Russian invasion of Ukraine. **Finland is now the 31st NATO member. Sweden's bid is being held up by Turkey and Hungary. Hence statement 3 is not correct.**

7. (a)

Statement 1 is correct: SCO is a Eurasian political, economic, international security and defence organization founded in Shanghai in 2001.

Statement 2 is correct: It is the world's largest regional organization in terms of geographic scope and population, covering approximately 60% of the area of Eurasia, **40% of the world population, and more than 30% of global GDP.**

Statement 3 is incorrect: India, Pakistan and Iran received observer status at the 2005 SCO summit in Astana, Kazakhstan. **India and Pakistan became full members of the Shanghai Cooperation Organization in 2017.**

8. (b)

The doctrine of promissory estoppel

- **What is the doctrine?**
 - Promissory estoppel is a concept developed in **contractual laws**. **Hence statement 1 is correct.**
 - A valid contract under law requires an **agreement to be made with sufficient consideration.**
- **Significance:**
 - A claim of doctrine of promissory estoppel essentially **prevents a “promisor” from backing out of an agreement** on the grounds that there is no “consideration.” **Hence statement 2 is correct.**
- **How?**
 - The doctrine is invoked in court by a plaintiff (the party moving court in a civil action) against the defendant to ensure execution of a contract or seek compensation for failure to perform the contract.
 - **Checklist for application:**
 - In a 1981 decision in Chhaganlal Keshavlal Mehta v. Patel Narandas Haribhai, the SC lists out a checklist for when the doctrine can be applied. **Hence statement 3 is incorrect.**
- First, there must be a clear and unambiguous promise.
- Second, the plaintiff must have acted relying reasonably on that promise.
- Third, the plaintiff must have suffered a loss.

9. (c)

India in Nepal's hydropower

- A careful reading of India's Nepal policy in the past few years suggests that Delhi has quietly taken the lead in Nepal with its push for connectivity, especially in hydropower development and trade.
- **List of hydropower Projects:**
 - **Arun III project:**
 - The 900 MW **Arun III project** is being developed by a subsidiary of **Satluj Jal Vidyut Nigam (SJVN)**, and is moving ahead at a quick pace. **Hence option 4 is correct.**
 - **Seti project:**
 - Nepal has signed an agreement with NHPC Limited to develop both the 750 MW **West Seti project**, from which China's Three Gorges Corporation had pulled out citing it was financially not viable, and the additional 450 MW **Seti River 6 project** on the same river. **Hence option 2 is correct.**
 - **Upper Karnali project:**

- The Indian corporate GMR group has been given the license to develop the 900 MW Upper Karnali project.
- However, the project has run into trouble with the company being unable to achieve financial closure within the stipulated deadline.
- Phukot Karnali project, Tamor River project:
 - Two of the hydro projects listed under possible BRI ventures inside Nepal—the 480 MW Phukot Karnali project and the 756 MW Tamor River storage-type project—have been awarded to NHPC and SJVN respectively.
- The 720 MW Mangdechhu hydroelectric project was jointly inaugurated in August 2019 by the Hon'ble Prime Ministers of India and Bhutan. Hence option is 1 incorrect.
- Tipaimukh is the Hydro-Electric (Multipurpose) Project in India. Hence option 3 is incorrect.

10. (b)

Statement 1 is not correct: Together the member countries represent 40% of global GDP and 10% of the world's population.

Statement 2 is correct: Unlike other bodies such as NATO, the G7 has no legal existence, permanent secretariat or official members.

Statement 3 is correct: It traces its origin to an informal meeting of the Finance Ministers of France, West Germany, the US, Great Britain and Japan (Group of Five) in the wake of the 1973 oil crisis.

11. (c)

Statement 1 is not correct: IAEA was established in 1957 as an autonomous organisation, at the height of the Cold War (1945-1991) between the US and the Soviet Union.

- Though established independently by the UN through its own international treaty, the agency reports to both the UN General Assembly and the Security Council.

Statement 2 is correct: As the preeminent nuclear watchdog, the IAEA is entrusted with the task of upholding the principles of the Nuclear Non-Proliferation Treaty, 1970.

Statement 3 is not correct: It deals with the sovereign states and their pursuit of civil and military nuclear programmes.

12. (c)

State of World Population Report:

- The State of World Population Report is United Nations Population Fund's (UNFPA) annual flagship publication.
- It has been published yearly since 1978.
- It shines a light on emerging issues in the field of sexual and reproductive health and rights, bringing them into the mainstream and exploring the challenges and opportunities they present for international development.
- 2023 World Population Report highlights:
 - India is set to overtake China to become the world's most populous country by the middle of 2023, according to data released by the United Nations.
- India's population is pegged to reach 142.86 crore against China's 142.57 crore. This shows India

will have 29 lakh more people than China.

- **Globally:** The world's population hit the 800-crore mark in November 2022. Just eight countries will account for half the projected growth in global population by 2050. The Democratic Republic of Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and the United Republic of Tanzania

13. (a)

Statement 1 is correct: The World Gold Council (WGC) is a nonprofit association of the world's leading gold producers. The WGC covers the markets which comprise about three-quarters of the world's annual gold consumption. Headquartered in London, they have offices in India, China, Singapore, Japan and the United States.

Statement 2 is correct: India's gold imports contribute to the second largest part of the import bill after oil.

Statement 3 is not correct: Golden Dawn Operation was a pan India operation by the Directorate of Revenue Intelligence (DRI) who busted a gold smuggling syndicate of Sudanese nationals operating through the Nepal border.

■ ■ ■ ■

Science & Technology

1. Consider the following statements regarding ISRO's Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme:
1. An Indian Air Forces (IAF) Chinook helicopter was used to drop the RLV-TD.
 2. The key objective of mastering the RLV technology is to achieve low cost access to space.
 3. India is the first country to configure the Reusable Launch Vehicle-Technology.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) 1 and 2 only (d) 1, 2 and 3
2. The Terms DOCSIS, xDSL, FITL are used in which of the following industries?
- (a) Manufacturing (b) Telecommunication
(c) Mineral extraction (d) Consumer Goods
3. Consider the following statements with reference to Dial-up internet connection:
1. It uses the facilities of the public switched telephone network (PSTN) to establish a connection.
 2. It uses hotspot connections to decode audio signals into data to send to a router.
 3. Dial-up internet speeds were theoretically capable of reaching a maximum of 56 kilobits per second.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
4. Pseudomonas aeruginosa belongs to which category of microorganisms?
- (a) Virus (b) Bacteria
(c) Protozoa (d) Algae
5. Consider the following statements:
1. Meteors are chunks of rocks and ice that are ejected from comets.
 2. Comets show a perceptible growing tail while asteroids don't.
 3. Comets are found mostly between Venus and Mercury.
- Which of the statements given above is/are **not correct**?
- (a) 1 only (b) 1 and 3 only
(c) 1 and 2 only (d) 3 only
6. Consider the followings statements:
1. Ministry of Earth Sciences is responsible for the administration of the Indian Space Programme.
 2. FDI in the space sector is allowed up to 100% in the area of Satellites Establishment and Operations through Government route only.
 3. Department of Space expenditure has been increased by 8% in the 2023-24 Union Budget.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 1 and 3 only
(c) 2 only (d) 2 and 3 only

- 7.** With reference to The Tropospheric Emissions: Monitoring of Pollution (TEMPO) mission, consider the following statements:
1. It is a joint initiative of the European Space Agency and Indian Space Research Organisation (ISRO).
 2. It will measure atmospheric pollution covering only the Asian continent.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 8.** Consider the following statements regarding the 'Genome India Project':
1. It is an open global initiative that charts the genome sequence of all the species worldwide.
 2. The project will boost India's biotechnology sector to expand and have more valuable companies and start-ups.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 9.** 'DENV-4' term was recently in news in context of:
- (a) Ancient fossil found in Israel (b) New mutation of Influenza
(c) Dengue Virus Lineage (d) Satellite launched by NASA
- 10.** Consider the following statements:
1. Uranium is a silvery-grey radioactive chemical element with atomic number 92.
 2. Kazakhstan has the largest reserves of uranium in the world.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 11.** With reference to the NISAR Satellite, consider the following statements:
1. It is a Low Earth Orbit (LEO) Earth-observation satellite.
 2. NISAR will map the entire globe in 24 hours.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 12.** With reference to Graphene, consider the following statements:
1. It is one of the thinnest but strongest materials tested so far.
 2. They can be used to dramatically increase the lifespan of a traditional lithium-ion battery.
 3. They can be used in biochemical sensors.
 4. They can be used as carriers of drugs and antigens in the human body.
- Which of the statements given above are correct?
- (a) 1 and 2 only (b) 2,3 and 4 only
(c) 1,3 and 4 only (d) 1,2,3 and 4

- 13.** Consider the following statements regarding Anti- microbial resistance (AMR)
1. It can occur only in Viruses.
 2. It does not occur naturally.
 3. It is found in people, animals, food, plants and the environment.
 4. Main drivers of antimicrobial resistance include the misuse and overuse of antimicrobials.
- Which of the following statements are correct?
- (a) 1 and 2 only (b) 3 and 4 only
(c) 1, 2 and 3 only (d) 1, 2, 3, and 4
- 14.** Consider the following statements regarding Rabies disease:
1. Rabies is a vaccine-preventable, zoonotic, viral disease caused by a Ribonucleic Acid (RNA) virus.
 2. Saliva from an infected animal can also transmit rabies.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 15.** He was a physicist-turned-biologist who had shown, more than a century ago, that plants experienced sensations and were able to feel pleasure and pain just like animals. He is also credited as one of the first contributors to solid state physics. He is remembered for two things — his work on wireless transmission of signals, and on the physiology of plants. Which of the following scientist is described above?
- (a) C V Raman (b) Jagdish Chandra Bose
(c) Homi J Bhabha (d) Satyendra Nath Bose
- 16.** Consider the following statements with reference to the Blastomycosis:
1. It is a viral infection caused by Blastomyces.
 2. It can spread between people or between people and animals through the air.
 3. There is no vaccine to prevent blastomycosis.
- Which of the following statements are **not** correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
- 17.** Consider the following statements with reference to Nuclear Power:
1. It is the world's second largest source of low-carbon power.
 2. India is the first country to conduct nuclear tests outside the five nuclear weapons states recognised under the Non-Proliferation Treaty (NPT).
 3. After the 123 Agreement, India became the only country allowed to engage in nuclear trade with the rest of the world despite not being a part of NPT.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only (b) 3 only
(c) 2 and 3 only (d) 1, 2 and 3
- 18.** Consider the following statements:
1. Web1.0 was a read-only model and internet users were just consumers of information.
 2. Web2.0 is a name for the current state of the internet and relies heavily on intermediaries such as banks.
 3. Web3.0 is a read/write/own model where data is stored on centralized servers.

Which of the statements given above is/are correct?

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

19. Consider the following pairs:

Planned Mission

Objectives

1. Artemis Mission to study Sun 'atmosphere
2. Aditya L1 Mission for Moon Landing
3. Shukrayaan-1 Planned orbiter to Venus

How many pairs given above are correctly matched?

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

20. Consider the following statement regarding Digital Science Park:

1. It will support the development of products in the area of Industry 4.0 Technologies like AI, Data Analytics, Cyber Security etc.
2. India's first Digital Science Park will be established in Ahmedabad, Gujarat.

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)

ISRO's Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme:

- **Objective:**
 - One of the key objectives of mastering the RLV technology is to achieve low cost access to space. Hence statement 2 is correct.
- **Course of landing experiment:**
 - An Indian Air Forces (IAF) Chinook helicopter was used to drop the RLV-TD from a 4.5 km altitude and ISRO executed the landing experiment of the RLV-TD as planned. Hence statement 1 is correct.
 - The release of the RLV was autonomous as it performed approach and landing maneuvers using Integrated Navigation, Guidance, and control system and completed an autonomous landing on the airstrip.
- **Significance:**
 - The space agency ISRO has said that in a first in the world, a winged body has been carried to an altitude of 4.5 km by helicopter and released for carrying an autonomous landing on a runway.
- **NASA:**
 - Reusable space vehicles have been in existence for a long time with NASA space shuttles carrying out dozens of human space flight missions. Hence statement 3 is not correct.

2. (b)

DOCSIS, xDSL, FITL are wire line **internet communication Technologies**. DOCSIS stands for Data Over Cable Service Interface Specification, xDSL stands for Digital subscriber line; it is a technology used by traditional telephone companies to deliver advanced services (high-speed data and sometimes video) over twisted pair copper telephone wires. Fiber in the loop (FITL) technology is used by telephone local exchange carriers to provide advanced services to telephone customers over the plain old telephone service.

3. (c)

Statement 1 is correct: Dial-up Internet access is a form of Internet access that uses the facilities of the **public switched telephone network (PSTN)** to establish a connection to an Internet service provider (ISP) by dialling a telephone number on a conventional telephone line.

Statement 2 is not correct: Dial-up connections **use modems to decode** audio signals into data to send to a router or computer.

Statement 3 is correct: Dial-up internet speeds were theoretically capable of reaching a maximum of **56 kilobits per second**.

4. (b)

Pseudomonas aeruginosa is a common **gram-negative, rod-shaped bacteria** that can cause disease in plants and animals, including humans.

5. (d)

Statement 1 is correct: A meteor is a streak of light in the sky caused by a meteoroid crashing through Earth's atmosphere. Meteoroids are lumps of rock or ice that orbit the sun. **Most meteor showers come from comets**, whose material is quite fragile.

Statement 2 is correct: When a comet gets close to the Sun, its ice and dust content start to vaporize. So, when seen in a telescope, a comet appears fuzzy and has a tail. Asteroids, made up of rocky material and metal, are **devoid of any such perceptible growing tail**.

Statement 3 is not correct: Comets are mostly found way out in the solar system. Some exist in a wide disk beyond the orbit of Neptune called the Kuiper Belt. Other Comets live in Oort Cloud, the sphere shaped, outer edge of the solar system that is about 50 times farther away from the Sun.

6. (c)

In News: The Union government has approved the Indian Space Policy 2023.

Statement 1 is not correct : Indian Space Programme is characterized by a **vision** to use space technology for **national development**. **Department of Space (DOS)** is responsible for the administration of the Indian Space Programme.

Statement 2 is correct : FDI in space sector is allowed up to **100% in the area** of Satellites-Establishment and Operations through Government route only.

Statement 3 is not correct : The Department of Space **expenditure has been slashed by 8% in the 2023-24 Union Budget**, down to ₹12,543.91 crores, from ₹13,700 crores in the previous Budget estimate. However, this is 19% higher than the revised estimate from the last fiscal.

7. (d)

In News: NASA's high-resolution air pollution monitoring instrument TEMPO lifted atop a SpaceX Falcon 9 rocket from the Cape Canaveral Space Force Station in Florida.

Statements 1 and 2 are not correct: Tropospheric Emissions: Monitoring of Pollution (TEMPO) mission is the first funded project of **NASA's Earth Venture Instrument program**, which includes small, targeted science investigations designed to complement NASA's larger research missions.

- It is part of the agency's Earth System Science Pathfinder program.
 - It will measure atmospheric pollution covering most of North America, from Mexico City to the Canadian tar/oil sands, and from the Atlantic to the Pacific hourly and at high spatial resolution.
- It covers not only the continental United States, but also Canada, Mexico, Cuba, the Bahamas, and part of the island of Hispaniola.

8. (b)

Genome India Project

- It is a **Centre-backed, Department of Biotechnology's (DBT) initiative** to sequence 10,000 Indian human genomes in three years and create a database. **Hence statement 1 is incorrect.**
- **Significance:** Creating a database of Indian genomes means that researchers anywhere can learn about genetic variants that are unique to India's population groups and use that to customize drugs and therapies.
 - It will also boost India's biotechnology sector to expand and have more valuable companies and start-ups. **Hence statement 2 is correct**

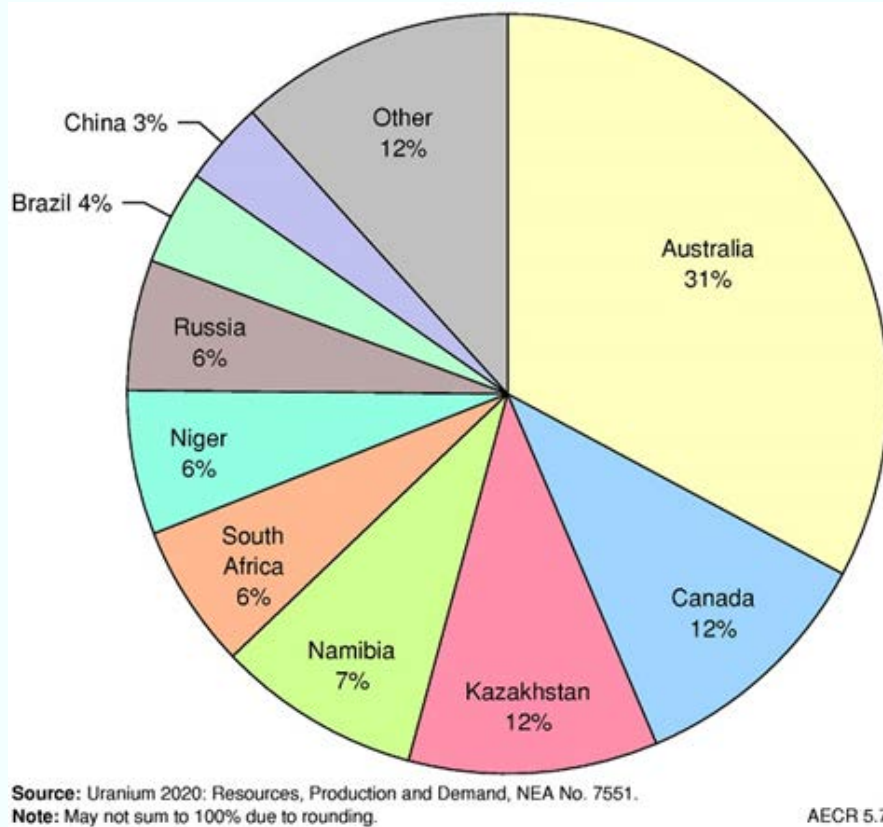
9. (c)

The DENV-4-Id lineage is dominant in South India, and about 50% of **dengue virus infections in South India** are due to this India-unique lineage. The dominant immune selection pressure has led to the emergence of a unique Indian dengue lineage (DENV-4-Id) belonging to serotype 4 (DENV-4).

10. (a)

Statement 1 is correct: Uranium is a naturally occurring chemical element with the symbol **U** and atomic number **92**. It is a **silvery-grey** metal in the actinide series of the periodic table.

Statement 2 is not correct: **Australia** has largest reserves of uranium followed by Canada and Kazakhstan.



11. (a)

Statement 1 is correct: NISAR is an Earth-observation satellite, being jointly developed by the **National Aeronautics and Space Administration (NASA)** and the **Indian Space Research Organisation (ISRO)**.

Statement 2 is not correct: It was envisioned by NASA and ISRO eight years **ago** in **2014**. The satellite will operate for a **minimum of three years**. It is a **Low Earth Orbit (LEO) observatory**. NISAR will map the **entire globe** in 12 days.

12. (d)

Statement 1 is correct: It has exceptionally high tensile strength, electrical conductivity, transparency, and thinnest two-dimensional material in the world.

Statement 2 is correct: Graphene could dramatically increase the lifespan of a traditional lithium-ion battery i.e., devices can be charged quicker – and hold more power for longer.

Statement 3 is correct: **Ultra-sensitive sensors** made from graphene could detect minute dangerous particles, helping to protect **potentially dangerous environments**.

Statement 4 is correct: Graphene's unique properties allow for ground-breaking biomedical applications. Targeted drug delivery, improved brain penetration etc.

13. (b)

Statement 1 is not correct: AMR occurs in bacteria, fungi and parasites also in addition to viruses.

Statement 2 is not correct: AMR occurs naturally over time, usually through genetic changes.

Statement 3 is correct: Antimicrobial-resistant organisms are found in people, animals, food, plants and the environment (in water, soil and air).

Statement 4 is correct: The main drivers of antimicrobial resistance include the misuse and overuse of antimicrobials, lack of access to clean water, sanitation and hygiene (WASH) for both humans and animals, poor infection and disease prevention and control in healthcare facilities and farms, poor access to quality, affordable medicines, vaccines and diagnostics, lack of awareness and knowledge, and lack of enforcement of legislation.

14. (c)

Statement 1 is correct: Rabies is a vaccine-preventable, zoonotic, viral disease caused by a **Ribonucleic Acid (RNA) virus**. It was historically referred to as hydrophobia (fear of water) due to the symptom of panic when presented with liquids to drink.

Statement 2 is correct: It is spread when an infected animal bites or scratches a human or other animals. Saliva from an infected animal can also transmit rabies if the **saliva comes into contact with the eyes, mouth, or nose**.

15. (b)

Jagadish Chandra Bose (1858-1937)

- He was a physicist-turned-biologist who had shown, more than a century ago, that plants experienced sensations and were able to feel pleasure and pain just like animals.
- He invented the crescograph, a device for measuring the growth of plants.
- Jagadish Chandra Bose is remembered for two things — his work on wireless transmission of signals, and on the physiology of plants. He is also credited as one of the first contributors to solid state physics. He had anticipated the p-type and n-type semiconductors.
- Bose is widely believed to be the first one to generate electromagnetic signals in the microwave range. He was the first one to come up with radio receivers, which enabled wireless telegraphy.

16. (a)

Statement 1 is not correct: It is an infection caused by a **fungus called Blastomyces**. The fungus lives in the environment, particularly in **moist soil and in decomposing matter** such as wood and leaves.

Statement 2 is not correct: Blastomycosis doesn't spread between people or between people and animals through the air. In extremely rare cases, blastomycosis has been spread between infected people or animals through **needlestick injuries, bites, or sexual contact**.

Statement 3 is correct: Prevention: No vaccine to prevent blastomycosis. Itraconazole is a type of antifungal medication that is typically used to **treat mild to moderate blastomycosis**.

17. (d)

Statement 1 is correct: Nuclear is the **second largest source of low-carbon electricity** in the world behind hydropower. Nuclear is a zero-emission clean energy source. It also keeps the air clean by removing thousands of tons of harmful air pollutants each year that contribute to acid rain, smog, lung cancer and cardiovascular disease.

Statement 2 is correct: Smiling Buddha: On 18 May 1974, India conducted '**Operation Smiling Buddha**'— or **Pokhran-I**, the country's first successful nuclear test. The event made India the first country to conduct nuclear tests outside the five nuclear weapons states recognised under the Non-Proliferation Treaty (NPT). One of the more direct impacts of the 1974 test was the establishment of the Nuclear Suppliers Group (NSG) in 1974.

- Subsequently, India's successful nuclear tests on 11 and 13 May 1998 forced the world to acknowledge India's entry into the nuclear order.

Statement 3 is correct: 123 Agreement: The talks between India and the US created the framework for renewed bilateral relations, as a result of which the '123 agreement' (also known as US-India Civil Nuclear Agreement) was signed in 2008. India became the only country with nuclear weapons who was not a party to the NPT that was allowed to engage in **nuclear trade with the rest of the world.**

18. (a)

Statement 1 is correct: Web1.0 Read-Only (1990-2004): In the 1990s and early 2000s, the internet consisted of **static pages** that users would casually read, or surf. It was **read-only and internet users were just consumers of information.** Example: **Yahoo** that would show news, weather, sports, entertainment and financial information.

Statement 2 is correct: Web2.0 Read-Write (2004-now): Web2 is a name for the **current state of the internet**, with which users can now **interact with web pages.** The internet no longer just displays information, but it can change based on a reader's preferences and users can upload content onto the websites of others. Web2 transformed the internet to a **read/write model from the initial read only.** Web2 **relies heavily on intermediaries** such as banks, social media platforms, and online marketplaces to facilitate transactions and interactions.

Statement 3 is not correct: Web3 has the potential to change the nature of the internet from **corporate-owned networks to controlled by users** while maintaining the Web2 functionalities. It can also be described as **read/write/own.** Users can govern these blockchain-based networks through **cryptocurrency tokens.** As the network grows, value can accrue to the community through the rising price of tokens.

- It is known as the **decentralised web**, it allows for the creation and exchange of digital assets, **decentralised applications (dApps)**, and smart contracts in the blockchain system.

19. (a)

Pair 1 is incorrect: The Artemis program is intended to reestablish a human presence on the Moon for the first time since the Apollo 17 mission in 1972.

Pair 2 is incorrect: Aditya L1 is a planned coronagraphy spacecraft to study solar atmosphere, currently being designed and developed by the Indian Space Research Organization. (ISRO)

Pair 3 is correct: Shukrayaan-1 is a planned orbiter to Venus by the Indian Space Research Organization to study the surface and atmosphere of Venus.

20. (a)

Statement 1 is correct: Digital Science Park will house common facilities to support the development of products in the area of Industry 4.0 Technologies like AI, Data Analytics, Cyber Security etc.

Statement 2 is incorrect: Country's first Digital Science Park will be established in **Thiruvananthapuram, Kerala.**



Environment & Ecology

1. Which of the following organisation/s has established 30th March 2023 as the first-ever International Day of Zero Waste?
1. United Nations Environment Programme (UNEP)
 2. International Union for Conservation of Nature (IUCN)
 3. Intergovernmental Panel on Climate Change (IPCC)
 4. UN Human Settlements Programme (UN-Habitat)
- Choose the correct answer using the codes given below:
- (a) 1 only (b) 2 and 3 only
(c) 3 only (d) 1 and 4 only
2. The National Park is situated along the summit of the Western Ghats in the high ranges of Idukki district of Kerala. This is also the land of "Neelakurinji". It is also the natural habitat of Nilgiri tahr. The above descriptions talk about which of the following National Parks?
- (a) Guindy National Park (b) Bandipur National Park
(c) Eravikulam National Park (d) Nagarhole National Park
3. Moyar river flows through which of the following Protected Areas?
- (a) Sathyamangalam Wildlife Sanctuary
(b) Wayanad Wildlife Sanctuary,
(c) Bandipur National Park
(d) Silent Valley National Park
4. Consider the following statements:
1. The 'Project Tiger' is a Centrally Sector Scheme launched in 1973 to promote conservation of the tiger.
 2. The National Tiger Conservation Authority (NTCA) is a statutory body.
 3. The 'M-STrIPES' is mainly used in the context of captive breeding of Wild Fauna.
- Which of the above given statements is/are **not correct**?
- (a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3 only
5. Consider the following statements:
1. Project tiger focuses on the conservation of the big cats as well as their natural habitat.
 2. Project tiger recently completed thirty years since its inception in 1993.
 3. The number of tigers in India has recently seen a sharp decline according to the 5th cycle of India's Tiger Census.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 1 and 2 only
(c) 2 and 3 only (d) 3 only

6. "The Tiger reserves lies in Palakkad district and Thrissur district of Kerala. It is in the Sungam range of hills between the Anaimalai Hills and Nelliampathy Hills. It is the home of four different tribes of indigenous peoples including the Kadar, Malasar, Muduvar and Mala Malasar. Important mammals include: lion-tailed macaques, Nilgiri tahr, elephants, Bengal tigers, Indian leopards, wild boar, dhole etc."

Which tiger reserve is explained above?

- (a) Nagarhole Tiger Reserve (b) Parambikulam Tiger Reserve
(c) Periyar Tiger Reserve (d) Bandipur Tiger Reserve

7. Consider the following statements regarding the 'International Big Cats Alliance (IBCA):

1. It aims to conserve seven big cats namely Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar and Puma.
2. It is an initiative by the International Union for Conservation of Nature (IUCN).

Which of the statements given above is/are correct?

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

8. Consider the following statements regarding Rhinos:

1. Rhinoceroses are large, herbivorous mammals found only in Asia.
2. Greater One-Horned Rhino is native to the Indian subcontinent.

Which of the following statements is/are correct?

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

9. Consider the following statements regarding the Carbon Border Adjustment Mechanism (CBAM):

1. It is a duty on imports based on the amount of carbon emissions resulting from the production of the product.
2. It was proposed by India along with the European Union At COP27.

Which of the statements given above is/are correct?

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

10. Consider the following statement regarding Toque Macaque:

1. It is Endemic to Bangladesh and Myanmar.
2. It is classified as Vulnerable on the International Union for Conservation of Nature (IUCN) red list.

Which of the statements given above is/are correct?

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

11. Consider the following statements regarding groundwater in India.

1. Around 90% of groundwater depletion in India is due to the Industrial sector.
2. Around 85% of rural water requirements and 50% of urban areas' water requirements are fulfilled by groundwater.
3. India was declared as the highest groundwater user in the world in 2018.

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 |

12. Consider the following statements, with reference to Malaria disease:

1. It is transmitted mostly through the bites of infected female Anopheles mosquitoes.
2. India has set a target to be malaria-free by 2025.
3. There is no vaccine approved for Malaria till now.

Which of the following statements is/are correct?

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

13. With reference to the State of the Global Climate 2022 report, consider the following statements:

1. It is published by the Intergovernmental Panel on Climate Change (IPCC).
2. The annual increase of methane in 2020-21 was the largest on record.
3. Summit Station, the highest point in Greenland, experienced rainfall for the first time.

Which of the statements given above is/are correct?

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

EXPLANATIONS

1. (d)

The world marked the **first-ever International Day of Zero Waste** on March 30, 2023. The **United Nations Environment Programme (UNEP)** and **UN Human Settlements Programme (UN-Habitat)** established the day in response to the worsening impacts of waste on human health, the economy and the environment.

2. (c)

In News: **Eravikulam National Park (ENP)**, the natural habitat of **Nilgiri tahr** in Munnar, has a new attraction — a **Fernarium** setup inside the park.

Eravikulam National Park (ENP)

- Eravikulam National Park situated along the **summit of the Western Ghats** in the high ranges of Idukki district of Kerala.
- This is also the **land of "Neelakurinji"**, a flower that blooms once in **twelve years**. The highest peak south of the Himalayas – the **Anamudi** is located here.
- The park is also known as **Rajamalai National Park**. It was declared as a sanctuary with an objective of protecting the **indigenous population of Nilgiri Tahr (most endangered mountain goat)** when founded in the year 1975 and was then upgraded as the **national park in 1978**.

3. (c)

The Moyar River is one of the tributaries of the Bhavani in Tamil Nadu, South India. It forms a natural line of separation between the state of Karnataka and Tamil Nadu and a separation between the forests of Bandipur National Park and the Mudumalai sanctuary to the south.

4. (c)

Statement 1 is not correct: Project Tiger is a **Centrally Sponsored Scheme** that was launched by the Central government on April 1, 1973, to promote conservation of the tiger. The centrally sponsored schemes are jointly funded by the Centre and states. The Project was launched at the Jim Corbett National Park, the programme was initially started in nine tiger reserves of different States such as Assam, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Uttar Pradesh and West Bengal.

Statement 2 is correct: The National Tiger Conservation Authority (NTCA) is a **statutory body** under the Ministry of Environment, Forests and Climate Change constituted under enabling provisions of the Wildlife (Protection) Act, 1972.

Statement 3 is not correct: The “**M-STripES**” is a platform where modern technology is used to assist effective patrolling, assess ecological status and mitigate human-wildlife conflict in and around tiger reserves. The M-STripES program uses Global Positioning System (GPS), General Packet Radio Services (GPRS), and remote sensing, to collect information from the field, create a database using modern Information Technology (IT) based tools.

5. (a)

Origin of ‘Project Tiger’:

- To **tackle the problem of hunting and poaching** of not just tigers but also other animals and birds, then Prime Minister Indira Gandhi promulgated the **Wildlife Protection Act in 1972**.
 - Project Tiger was launched by the Central government on April 1, 1973, in a bid to promote conservation of the tiger.
 - Notably, Project Tiger didn’t just focus on the conservation of the big cats.
 - It also ensured the preservation of their natural habitat as tigers are at the top of the food chain.
- Hence statement 1 is correct.**

Tiger census highlights:

- The number of tigers in India has increased by 6.74 percent from 2,967 in 2018 to 3,167 in 2022, according to the **figures of the 5th cycle of India’s Tiger Census**.
 - Tiger Census figures were released by the Prime Minister at an event marking the “International Big Cat Alliance conference” and the “50th anniversary of Project Tiger”. Hence statements 2 and 3 are incorrect.

6. (b)

Parambikulam Tiger Reserve, which also includes the erstwhile Parambikulam Wildlife Sanctuary, is a 643.66 square km protected area lying in **Palakkad district and Thrissur district of Kerala**.

- It is in the **Sungam range of hills** between the Anaimalai Hills and Nelliampathy Hills.
- The Western Ghats, Anaimalai Sub-Cluster, including all of Parambikulam Wildlife Sanctuary, has been declared by the **UNESCO World Heritage Committee as a World Heritage Site**.
- The Tiger Reserve is the home of four different tribes of indigenous peoples including the **Kadar, Malasar, Muduvar and Mala Malasar**.

- This sanctuary is referred to as the "state capital for the massive gaur" by wildlife experts. Important mammals include: **lion-tailed macaques, Nilgiri tahr, elephants, Bengal tigers, Indian leopards, wild boar, dhole, sambar, bonnet macaques, Nilgiri langurs, sloth bears, Nilgiri marten small Travancore flying squirrel and gaur.**

7. (a)

International Big Cats Alliance (IBCA)

- To commemorate 50 years of Project Tiger, the Prime Minister of India launched the International Big Cat Alliance (IBCA). **Hence statement 2 is incorrect.**
- IBCA will focus on the **protection and conservation of seven major big cats** of the world, including **tiger, lion, leopard, snow leopard, puma, jaguar and cheetah**, with membership of the range countries harbouring these species. **Hence statement 1 is correct.**

8. (b)

Statement 1 is not correct: White rhinos and black rhinos live in the grasslands and floodplains of **eastern and southern Africa.**

Statement 2 is correct: Greater one-horned rhinos can be found in the swamps and rain forests of northern India and southern Nepal. The species is restricted to small habitats in Indo-Nepal terai and northern West Bengal and Assam.

- Kaziranga National Park, Pobitora Wildlife Sanctuary, Orang National Park, Manas National Park in Assam,
- Jaldapara National Park and Gorumara National Park in West Bengal and,
- Dudhwa Tiger Reserve in Uttar Pradesh.

9. (a)

The European Union has proposed a policy called the Carbon Border Adjustment Mechanism (CBAM) to **tax products** such as **cement and steel** that are **extremely carbon intensive**, with effect from 2026.

- It is a **duty on imports** based on the **amount of carbon emissions** resulting from the production of the product in question. **Hence statement 1 is correct.**

Opponents of CBAM:

- **BASIC Group:**
 - **BASIC**, a group constituting **Brazil, India, South Africa and China**, and therefore large economies that are significantly dependent on coal, has for several years voiced common concerns and reiterated their right to use fossil fuel in the interim during their countries' eventual transformation to clean energy sources.
 - **At COP27** BASIC group **opposed the 'carbon border tax'**. They have jointly stated that carbon border taxes, that could result in market distortion and aggravate the trust deficit amongst parties, must be avoided. **Hence statement 2 is not correct.**

10. (d)

In News: Recently, Sri Lanka confirmed China's request for importing 1,00,000 Toque macaques.

Statements 1 and 2 are not correct: Toque Macaque is a golden brown-coloured monkey.

- The toque macaque monkey is **Endemic to Sri Lanka**. It is known to destroy crops in several parts of Sri Lanka, and even sometimes attacks people.
- It is protected internationally under CITES Appendix II,
- It is classified as **Endangered** on the International Union for Conservation of Nature (IUCN) red list.

11. (c)

Statement 1 is incorrect: 90% of groundwater depletion in India is due to the **agriculture sector**. 8- 9% of Groundwater is utilized by households and is followed by the **Industrial sector (1-2%)**.

Statement 2 is correct: Around 85% of rural water requirements and 50% of urban areas water requirements are fulfilled by groundwater.

Statement 3 is correct: India is the **highest groundwater user in the world**, with an estimated usage of around 251 bcm per year, more than a quarter of the global total.

12. (a)

Statement 1 is correct: Malaria is a disease caused by parasites that are transmitted to people mostly through the bites of infected female **Anopheles mosquitoes** (Blood transfusion and contaminated needles may also transmit malaria).

Statement 2 is incorrect: India's vision to be **malaria-free by 2027** and to eliminate the disease by 2030.

Statement 3 is incorrect: Since October 2021, WHO recommends broad use of the **RTS,S/AS01 malaria vaccine**.

13. (b)

Statement 1 is not correct: The **State of the Global Climate 2022 report** has been released by the **World Meteorological Organization**. It focuses on key climate indicators – **greenhouse gases, temperatures, sea level rise, ocean heat and acidification, sea ice and glaciers**. It also highlights the impacts of climate change and extreme weather.

Statement 2 is correct: **Increase in Greenhouse Gases (GHGs) emissions:** Global GHGs emissions **continued to increase** in 2022. Carbon dioxide is at 149% of pre-industrial levels, Methane is at 262% of pre-industrial levels, Nitrous oxide is at 124% of pre-industrial levels.

- The annual increase of methane was 18 ppb from 2020 to 2021. This is the **largest increase on record**.
- **Statement 3 is correct: Sea Ice Extent:** Arctic sea-ice extent was **below the long-term average** for most of the year.
- **Antarctic sea-ice extent** dropped to the lowest level and almost 1 million km² below the long-term (1991-2020) mean. The total extent of Antarctic sea ice continued to **be below average**.
- **The Greenland Ice Sheet** ended with a **negative total mass balance** for the 26th year in a row. Summit Station, the highest point in Greenland, had its warmest September and experienced melting for the first time. **Heavy rain fell on the ice sheet for the first time**.



Miscellaneous

1. Which of the following statements are true regarding the International Prize in Statistics 2023?
 1. It has been awarded to Calyampudi Radhakrishna Rao.
 2. A new interdisciplinary area called 'information geometry' was born as a result of his 1945 published paper.Choose the correct answer using the codes given below:

(a) 1 only	(b) 2 only
(c) Both 1 and 2	(d) Neither 1 nor 2
2. 'Deadnaming', was in the news recently, it can be explained as:
 - (a) An act of calling a trans, non-binary person by the name that was given at birth which is no longer used by the person.
 - (b) A practice of naming a new born child on the basis of a recently dead person.
 - (c) An act of changing names of soldiers who are killed in war allegedly by Russia.
 - (d) None of the above

EXPLANATIONS

1. (c)

Statement 1 is correct: The Indian-American statistician Calyampudi Radhakrishna Rao has been awarded the **2023 International Prize in Statistics**.

Statement 2 is correct: In his **1945** paper published in the Bulletin of the Calcutta Mathematical Society, he demonstrated **three fundamental results** that paved the way for the modern field of statistics and provided statistical tools heavily used in science. A new interdisciplinary area called '**information geometry**' was born as a result of the paper's third finding.

2. (a)

The act of, intentionally or not, calling a trans, non-binary, and/or gender-expansive person by the deadname is known as deadnaming, which can lead to adverse consequences.

A deadname is essentially the name that a trans, non-binary, and/or gender-expansive person was called before they adopted a more self-affirming name.

