



KingMakers
IAS Academy

Good Morning Test

(GMT)

Prelims Compilation

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KingMakers IAS Academy

Chennai I Trichy I Madurai I Coimbatore I Salem I Namakkal I Pondicherry I New Delhi

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KingMakers IAS Academy

GOOD MORNING TEST (GMT)
SEPTEMBER 2024

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POLITY AND GOVERNANCE

1. Coconut Development Board

1. With reference to the "Coconut Development Board" in India, consider the following statements:

1. The Coconut Development Board is a statutory body.
2. It is a regulatory body attached to the Ministry of Commerce and Industry.
3. The Coconut Development Board's Head Office is situated in Kochi.
4. The Board has overseas offices in Indonesia and Philippines.

Which of the statements given above are correct?

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

Answer: (a) 1 and 3

Explanation:

In NEWS:Coconut Development Board Launches Revised Schemes

● Coconut Development Board (CDB) is a statutory body established under the Ministry of Agriculture and Farmers Welfare, Government of India for the integrated development of coconut cultivation and industry in the country with focus on productivity increase and product diversification. Hence Statement 2 is incorrect

● The Coconut Development Board (CDB) was established under the Coconut Development Board Act, 1979, making it a statutory body. Hence Statement 1 is correct

● The Head Office of the Coconut Development Board is in Kochi, Kerala, with Regional Offices at Bangalore in Karnataka, Chennai in Tamil Nadu, Guwahati in Assam and Patna in Bihar. Hence Statement 3 is correct

● No, the Coconut Development Board (CDB) does not have overseas offices, while the top coconut producing countries are Indonesia, the Philippines, and India, which together account for the majority of the world's coconut output. Hence Statement 4 is incorrect

PYQ REFERENCE:(2022)

Q. With reference to the "Tea Board" in India, consider the following statements:

1. The Tea Board is a statutory body.
2. It is a regulatory body attached to the Ministry of Agriculture and Farmers Welfare.
3. The Tea Board's Head Office is situated in Bengaluru.
4. The Board has overseas offices at Dubai and Moscow.

Which of the statements given above are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2163062>

2. Governor's role in assenting a bill

2. According to the Supreme Court's remarks in 2025, what is the correct interpretation of Article 200 of the Indian Constitution?

- (a) Governors have an absolute power to withhold State Bills indefinitely.
- (b) Governors must act with a sense of urgency and cannot assume monarchical roles.
- (c) Governors can override the wisdom of the legislature if public interest so demands.
- (d) Governors may withhold assent until the Union Government directs otherwise.

Answer: b) Governors must act with a sense of urgency and cannot assume monarchical roles.

Explanation:

In NEWS: Presidential Reference Hearing: Supreme Court Judges Say Governors Cannot Sit Endlessly Over Bills

Governor's role in assenting a bill:

● The Supreme Court in 2025 clarified that Governors must act with a sense of urgency and cannot assume monarchical roles (Option b is correct).

● It held that Governors cannot indefinitely delay Bills, as doing so would impair the Constitution's functioning.

● By contrast, the Court rejected the argument that Governors enjoy absolute power to withhold assent (Option a – incorrect), terming it an "absurdity."

● Similarly, it emphasized that Governors cannot override the legislature's wisdom (Option c – incorrect), since legislation is the domain of the elected assembly.

● Finally, assent under Article 200 is not dependent on Union Government direction (Option d – incorrect); the Governor is a constitutional head within the State framework.

PYQ REFERENCE: (2025)

Q. Consider the following statements regarding constitutional provisions in India:

I. The Constitution of India explicitly mentions situations where the Governor of a State can act in his/her discretion.

II. The President of India can, on his/her own, reserve a Bill passed by a State Legislature for consideration, even without it being forwarded by the Governor of the concerned State.

Which of the above statements is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Source: <https://thewire.in/law/presidential-reference-hearing-supreme-court-judges-say-governors-cannot-sit-endlessly-over-bills>

3. Vice President election

3. Consider the following statements in respect of election to the Vice President of India:

1. The candidate must have a minimum age of 35 years and be qualified to be elected as a member of the Lok Sabha.
2. The electoral college consists of all elected and nominated Members of Parliament from both the Lok Sabha and the Rajya Sabha.
3. The election is held through a secret ballot using the single transferable vote system

How many of the above statements are correct?

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

Answer: (b) Only two

Explanation:

In NEWS: PM votes in the 2025 Vice President election

Election of Vice President:

● The Vice President of India is elected by the members of both Houses of Parliament through a secret ballot using the single transferable vote system, as mandated by Article 66 of the Indian Constitution.

● Electoral College: Consists of all elected and nominated Members of Parliament (MPs) from both the Lok Sabha (House of the People) and the Rajya Sabha (Council of States). **Hence statement 2 is correct.**

● Voting System: Employs the single transferable vote system, allowing MPs to rank candidates in order of preference. This system ensures proportional representation and minimizes the chances of a candidate winning without broad support. **Hence statement 3 is correct.**

● The Vice President holds office for a term of five years.

● The election is conducted by the Election Commission of India.

Eligibility of Candidates:

● Must be a citizen of India.

● Minimum age of 35 years.

● Qualified to be elected as a member of the Rajya Sabha. **Hence statement 1 is incorrect.**

● Must not hold any office of profit under the government.

Role of the Vice President:

● The Vice President is the second-highest constitutional office in India.

● Serves as the ex-officio Chairman of the Rajya Sabha.

● Acts as the acting President in case of the President's absence, death, resignation, or impeachment.

● Performs other duties as assigned by the President of India.

PYQ REFERENCE: (2023)

Q. Consider the following statements in respect of election to the President of India:

1. The members nominated to either House of the Parliament or the Legislative Assemblies of States are also eligible to be included in the Electoral College.
2. Higher the number of elective Assembly seats, higher is the value of vote of each MLA of that State.
3. The value of vote of each MLA of Madhya Pradesh is greater than that of Kerala.
4. The value of vote of each MLA of Puducherry is higher than that of Arunachal Pradesh because the ratio of total population to total number of elective seats in Puducherry is greater as compared to Arunachal Pradesh.

How many of the above statements are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2164831>

<https://www.thehindu.com/news/national/pm-modi-to-cast-first-vote-in-vice-presidential-election/article70026942.ece>

4. Adi Karmayogi Abhiyan

4. Which one of the following is the correct description of 'Adi Karmayogi Abhiyan'?

- (a) A national movement spearheaded by the Ministry of Tribal Affairs to build a decentralized tribal leadership and governance ecosystem.
- (b) A digital initiative of NITI Aayog to promote startups in tribal areas.
- (c) A financial inclusion scheme for tribal artisans under the Ministry of Finance.
- (d) A major reform initiative launched by the Government of India aimed at transforming the capacity and efficiency of the civil services.

Answer: (a) A national movement spearheaded by the Ministry of Tribal Affairs to build a decentralized tribal leadership and governance ecosystem.

Explanation:

In NEWS: A GROUP OF EMINENT TRIBAL PEOPLE CALLS ON THE PRESIDENT AS PART OF ADI-KARMAYOGI ABHIYAAN

The Adi Karmayogi Abhiyan:

● The Adi Karmayogi Abhiyan is a national movement to build a decentralized tribal leadership and governance ecosystem.

● Spearheaded by the Ministry of Tribal Affairs, it empowers 20 Lakh tribal changemakers across 1 Lakh villages in 550 tribal-dominated districts through capacity building, convergence, and community participation. **Hence option (a) is correct.**

● Since the campaign's launch in July 2025, it has mobilized nearly 20 lakh Adi-Karmayogis — including government officials,

volunteers, women from self-help groups, and tribal youth — across one lakh villages.

- The initiative also includes one lakh Adi Seva Kendras, functioning as single-window service and grievance redressal centers.
- The Adi Karmayogi Portal serves as the digital backbone of this mission — enabling registration, training, monitoring, and transformation at scale.

Three Pillars of Leadership:

- **Adi Karmayogi** — Government Officers including IAS, IPS, IFS, BDOs, District Collectors, Govt / State Govt. Officers – Key drivers of governance at State, District, Block, and Panchayat levels. They ensure convergence of schemes, institutional support, and responsive delivery.
- **Adi Sahyogi** — Youth, Teachers, Doctors – Motivated service providers and educated tribal youth who bridge access to education, health, awareness, and innovation.
- **Adi Saathi** — SHG Members (NRLM), Villagers, Tribal Elders – Grassroots changemakers and community anchors who mobilize people, preserve traditions, and uphold local wisdom.

Key Objectives:

- Train and mobilize 20 Lakh Tribal Leaders
- Establish 1 Lakh Adi Sewa Kendras – Single Window Tribal Service Centres
- Facilitate Village Vision 2030 Planning & Development Action Plan
- Promote last-mile convergence & effective service delivery
- Capture & amplify voices of tribal communities

Training modules for leadership development:

- Village Visioning Templates – Upload and monitor locally crafted development blueprints
- Adi Sewa Kendras – Locate services nearest to each village
- Changemaker Stories – Celebrate tribal leadership & impact on the ground
- Feedback, Monitoring, Grievance Tools – Enable transparent and responsive governance

PYQ REFERENCE: (2024)

Q. Which one of the following is the correct description of 100 million Farmers?

- (a) It is a platform for accelerating the transition towards food and water systems that are net-zero (carbon), nature-positive and that aims to increase farmer resilience.
- (b) It is an international alliance and a network of individuals and farming organisations interested in supporting and strengthening the development of the organic animal husbandry.
- (c) It is a digital platform fully integrated with service providers and built on blockchain that lets buyers, sellers and third parties trade fertilizers quickly and securely.
- (d) It is a platform with the mission of encouraging the farmers to form Farmer Product Organisations or Agribusiness Consortia, thus facilitating the access to global open markets to sell their products.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2165012>

<https://adiprasaran.tribal.gov.in/adikarmayogi/Home.aspx>

5. Aadhar - Proof of Identity

5. Consider the following statements:

1. Aadhaar can be accepted as a valid Proof of Identity (PoI) across India.
2. Aadhaar is not only an identity document, it is also considered as a citizenship document.
3. Aadhaar is mandatory for availing all services in India including welfare schemes funded from the Consolidated Fund of India.

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

Answer: (a) 1 only

Explanation:

In NEWS: EC directs Bihar CEO to accept Aadhaar for SIR

Aadhaar – Proof of Identity:

- Aadhaar is a **12-digit unique identification number** issued by the Unique Identification Authority of India (UIDAI).
- It is based on an individual's **biometric (fingerprints, iris scan) and demographic data**.
- Aadhaar is accepted as a **valid Proof of Identity (PoI)** across India. **Hence statement 1 is correct.**
- It is also accepted as **Proof of Address (PoA), Proof of Date of Birth (DoB), and Proof of Relationship (PoR)**, depending on the document version.
- Aadhaar is **not a citizenship document**, but only an identity document. **Hence statement 2 is incorrect.**
- It is used for **availing subsidies, government schemes, opening bank accounts, mobile SIM verification, PAN linking, etc.**
- The **Aadhaar Act, 2016** governs its usage, subject to **privacy and data protection safeguards** (as per the Supreme Court judgment in *K.S. Puttaswamy vs. Union of India, 2018*).
- Aadhaar authentication is done online through **OTP, biometrics, or demographic details**.
- Aadhaar cannot be made **mandatory for all services**, but can be required for welfare schemes funded from the Consolidated Fund of India. **Hence statement 3 is incorrect.**
- For individuals, it serves as a **universal, portable, and unique proof of identity** across states and institutions.

PYQ REFERENCE: (2018)

Q. Consider the following statements:

1. Aadhaar card can be used as a proof of citizenship or domicile.
2. Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.

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

Source: <https://www.thehindu.com/elections/bihar-assembly/day-after-sc-order-election-commission-directs-bihar-ceo-to-accept-aadhaar-as-12th-document-in-voter-roll-revision/article70030249.ece>

6. Functions of Vice-President

6. Which of the following is/are the function/functions of the Vice-President?

1. In the absence of the President due to death, resignation, removal, the Vice-President acts as the President of India until a new President is elected.
2. He/She can participate in the voting of the Rajya Sabha in all instances.
3. He/She presides over the joint sitting of the parliament.

Select the correct answer using the code given below.

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

Answer: (a) 1 only

Explanation:

In NEWS: The new Vice-President can help end combative hostilities in the Rajya Sabha

Functions of Vice-President:

- The Vice-President is the **ex-officio Chairman of the Rajya Sabha** (Council of States).
- He/She **presides over the Rajya Sabha** and ensures its smooth functioning.
- The Vice-President **maintains order and decorum** in the Rajya Sabha.
- He/She **decides on points of order** raised in the House.
- The Vice-President has the **casting vote in case of a tie** in the Rajya Sabha.
- He/She **does not participate in the voting** of the Rajya Sabha except in the case of a tie. **Hence statement 2 is incorrect.**
- In the absence of the President due to death, resignation, removal, or otherwise, the Vice-President **acts as the President of India** until a new President is elected. **Hence statement 1 is correct.**
- During this period, the Vice-President **enjoys all powers and functions of the President.**

- The Vice-President also **represents India on various occasions** as assigned by the President.
- He/She **performs ceremonial and constitutional duties** when required.

Note: The president presides over the joint sitting of the parliament. **Hence statement 3 is incorrect.**

PYQ REFERENCE: (2014)

Q. Which of the following is/are the function/functions of the Cabinet Secretariat?

1. Preparation of agenda for Cabinet Meetings
2. Secretarial assistance to Cabinet Committees
3. Allocation of financial resources to the Ministries

Select the correct answer using the code given below.

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

Source:

<https://www.thehindu.com/opinion/editorial/man-of-faith-on-cp-radhakrishnan-15th-vice-president-of-india/article70034055.ece>

7. Features of Democracy

7. Which among the following are considered as essential features of a democratic rule?

1. Hereditary head of a State
2. Separation of Powers
3. Existence of a State Religion
4. Free and Fair Elections

Select the correct answer using the code given below:

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

Answer: (c) 2 and 4 only

Explanation:

In NEWS: Is more democracy the solution to the crises within democracy?

Features of Democratic Rule

1. **Popular Sovereignty** – Ultimate power rests with the people; the government derives authority from citizens.
2. **Rule of Law** – Everyone, including rulers, is subject to the law; no arbitrary exercise of power.
3. **Free & Fair Elections** – Regular, periodic elections based on universal adult suffrage.
4. **Majority Rule with Minority Rights** – Decisions follow majority, but rights of minorities are protected.
5. **Fundamental Rights & Freedoms** – Protection of speech, equality, association, religion, etc.

6. **Separation of Powers** – Legislature, executive, and judiciary operate independently with checks and balances.
7. **Independent Judiciary** – Neutral body to uphold the Constitution and resolve disputes.
8. **Political Pluralism** – Existence of multiple parties and ideologies; right to opposition.
9. **Decentralisation** – Distribution of power to different levels of government (federalism/local self-government).
10. **Accountability & Transparency** – Government is answerable to the people through parliament, courts, and elections.
11. **Equality** – Equal status and opportunity irrespective of caste, creed, gender, or class.
12. **Civil Society & Free Press** – Vibrant media and civic organisations act as watchdogs.

Hence 2 and 4 are correct.

PYQ REFERENCE: (2021)

Q. Which one of the following factors constitutes the best safeguard of liberty in a liberal democracy?

- (a) A committed judiciary
- (b) Centralization of powers
- (c) Elected government
- (d) Separation of powers**

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/is-more-democracy-the-solution-to-the-crises-within-democracy-10246146/>

8. Judicial custody VS Police custody

8. With reference to Indian Polity, consider the following statements:

1. In police custody, the accused is kept up in the jail, whereas the accused is kept in the lock up of the police station in judicial custody.
2. In police custody the accused remains under the control of the Investigating Officer, whereas the accused remains under the custody of the Magistrate in judicial custody.

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

Answer: (b) 2 only

Explanation:

In NEWS: Woman held in Delhi BMW crash case sent to judicial custody

Police Custody:

- **Meaning:** The accused is kept in the custody of the police for investigation. **Hence statement 1 is incorrect.**
- **Authority:** The accused remains under the control of the Investigating Officer but requires Magistrate's permission. **Hence statement 2 is correct.**

- **Duration:** Maximum **15 days** (under Section 167(2) CrPC).
- **Purpose:** To interrogate, recover evidence, prevent tampering.
- **Where kept:** Lock-up of the police station.
- **Rights:**
 - Must be produced before Magistrate within **24 hours** of arrest (Article 22, CrPC 57).
 - Right to legal counsel and family intimation.
 - Cannot be tortured (SC guidelines in *D.K. Basu vs State of West Bengal*).

Judicial Custody:

- **Meaning:** The accused is kept in prison (jail) under the orders of the Magistrate. **Hence statement 1 is incorrect.**
- **Authority:** Accused remains under the custody of the Magistrate (judicial authority), not police. **Hence statement 2 is correct.**
- **Duration:** Can extend up to **60 days** (for offences punishable <10 years) or **90 days** (for offences punishable >10 years / death / life imprisonment), after which **default bail** is available (Section 167(2) CrPC).
- **Purpose:** To ensure fair trial, prevent influence or pressure during investigation.
- **Where kept:** Central/ District Jail.
- **Rights:**
 - Right to bail (depending on circumstances).
 - Legal aid and humane treatment.
 - Visits by family, lawyer, and magistrate oversight.

PYQ REFERENCE: (2021)

Q. With reference to India, consider the following statements:

1. Judicial custody means an accused is in the custody of the concerned magistrate and such accused is locked up in police station, not in jail.
2. During judicial custody, the police officer in charge of the case is not allowed to interrogate the suspect without the approval of the court.

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

Source:

<https://www.thehindu.com/news/national/woman-driver-of-bmw-that-killed-finance-ministry-official-taken-into-police-custody/article70052020.ece>

9. Supreme Court Guidelines on DNA Testing

9. With reference to DNA testing in India, consider the following statements:

1. The Indian laws allow collection of biological samples only from the accused, not from the victim.
2. DNA test results are admissible in Indian courts under the Indian Evidence Act, 1872.
3. Providing DNA samples violates Article 20(3) of the Constitution as it amounts to self-incrimination.

Which of the statements given above is/are correct?

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

Answer: (b) 2 only

Explanation:

In NEWS: What do Supreme Court guidelines say on DNA?

Legal Framework for DNA Testing in India:

India does not yet have a standalone law regulating DNA testing, though several laws mention its use:

1. **Criminal Procedure Code (CrPC) – Sections 53, 53A, 164A:** Allows collection of biological samples from accused or victim (under judicial supervision). Requires medical examination with informed consent, especially in rape cases. **Hence statement 1 is incorrect.**

2. **Indian Evidence Act, 1872:** DNA test results can be admissible as evidence, provided proper chain of custody and procedure is followed. **Hence statement 2 is correct.**

3. **Human DNA Profiling Bill (Proposed):** First introduced in 2007, revised in 2015 & 2019. Seeks to create a DNA database, regulate collection, storage, and use. Has not been passed due to concerns over privacy and misuse.

4. **Judicial Guidelines (Supreme Court & High Courts):** Courts have issued guidelines to regulate DNA collection to protect individual rights and ensure fairness.

Supreme Court Guidelines on DNA Testing:

1. DNA testing is primarily used for forensic investigations, paternity disputes, and legal identification.

2. The procedure has high scientific accuracy but must be backed by strict legal and procedural safeguards.

3. DNA testing must be voluntary; **informed consent** is required from the individual.

4. If the individual is a **minor** or **mentally incapacitated**, consent must be obtained from a legal guardian.

5. Courts should **order DNA tests only when absolutely necessary and relevant** to the case.

6. Judicial orders must specify **whose sample is needed**, the **purpose**, and the **procedure** to be followed.

7. A strict **chain of custody** must be maintained for collecting, storing, and analyzing DNA samples to avoid contamination.

8. Only **accredited laboratories** should conduct the testing, following standard operating procedures.

9. **Privacy and security** of biological samples and DNA data must be ensured at all stages.

10. The issue of **self-incrimination** is debated, but courts generally hold that providing bodily samples does **not violate Article 20(3)** of the Constitution. **Hence statement 3 is incorrect.**

11. Courts may direct the **state to bear the cost** of DNA tests if the parties involved cannot afford it.

12. DNA testing must be conducted within a **reasonable timeframe** to avoid delays in justice.

13. DNA contains **sensitive personal information**, and its collection and use must comply with privacy norms.

14. Misuse of DNA data, such as unauthorized sharing or use for discrimination, is strictly prohibited.

15. DNA testing should be ordered **only in serious and relevant cases**, such as rape, murder, or disputed parentage.

16. **Mass or random collection of DNA samples** without a specific legal order is not permissible.

PYQ REFERENCE: (2023)

Q. 'Microsatellite DNA' is used in the case of which one of the following?

- (a) Studying the evolutionary relationships among various species of fauna
- (b) Stimulating 'stem cells' to transform into diverse functional tissues
- (c) Promoting clonal propagation of horticultural plants
- (d) Assessing the efficacy of drugs by conducting series of drug trials in a population

Source: <https://www.thehindu.com/sci-tech/science/what-do-sc-guidelines-say-on-dna-explained/article70048846.ece#:~:text=The%20Supreme%20Court%2C%20in%20the,varies%20from%20case%20to%20case.>

10. National Makhana Board

10. Consider the following statements:

1. Makhana or Gorgon plant, is a species of water lily found in southern and eastern Asia.
2. In India, Madhya Pradesh produces 90% of the world's makhana.
3. Makhana is approved under the One District One Product scheme
4. Makhana contains a low amount of sodium and a high amount of potassium, which is good for cardiac health.
5. The ideal conditions for cultivation of makhana includes a temperature range of 20°C to 35°C with relative humidity between 50% and 90% and annual rainfall of 100 to 250 cm.

Which of the statements given above are correct?

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

Answer: (a) 1, 3, 4 and 5

Explanation:

In NEWS: Prime Minister launched the National Makhana Board in Bihar.

Makhana (black diamond):

● Euryale ferox, commonly known as prickly water lily, makhana, or Gorgon plant, is a species of water lily found in southern and eastern Asia, and the only extant member of the genus Euryale. **Hence statement 1 is correct.**

● The edible seeds, called fox nuts or makhana, are dried, and eaten predominantly in Asia.

- The plant is cultivated for its seeds in lowland ponds in India, China, and Japan.
- The Indian state of **Bihar** produces 90% of the world's fox nuts. **Hence statement 2 is incorrect.**
- The Chinese have cultivated the plant for centuries.
- In India, more than 96,000 hectares of Bihar were set aside for cultivation of Euryale in 1990–1991.
- In the northern and western parts of India, the seeds are often roasted or fried, which causes them to pop like popcorn. It has gained popularity as a 'superfood' for its rich nutritional properties — makhana is nutrient-dense, low-fat, and an ideal "healthy snack"
- Climatic conditions:
 - Temperature: 20°C to 35°C
 - Relative humidity :50% to 90%
 - Annual rainfall: 100 to 250 cm
 - Soil: Smooth loamy soil. **Hence statement 5 is correct.**
- Makhana is a product approved under the One District One Product scheme, under which subsidies are provided to food processors for branding, marketing, and developing infrastructure. **Hence statement 3 is correct.**

Health Benefits:

- It has high fibre content, low glycemic index and phytochemical constituents.
- It contains an insignificant amount of fat and is rich in protein.
- It prevents high blood pressure and sugar.
- The high calcium content with nominal saturated fat of makhana strengthens bones and muscles.
- Makhana contains a low amount of sodium and a high amount of potassium, which is good for cardiac health. **Hence statement 4 is correct.**



PYQ REFERENCE:

Q. Consider the following statements:

1. Moringa (drumstick tree) is a leguminous evergreen tree.
2. The Tamarind tree is endemic to South Asia.
3. In India, most of the tamarind is collected as minor forest produce.
4. India exports tamarind and seeds of moringa.
5. Seeds of moringa and tamarind can be used in the production of biofuels.

Which of the statements given above are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2166835>

11. Freedom of Religion

11. Consider the following statements:

1. The freedom to openly declare one's religious beliefs and faith.
2. The freedom to perform religious rituals, ceremonies, and other outward expressions of faith.
3. The inner freedom of an individual to form their own beliefs about God or the divine.

How many of the above freedoms are permitted under Article 25 of the Indian Constitution?

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

Answer: (c) All three

Explanation:

In NEWS: Top court asks who will decide that a religious conversion is 'deceitful'

Article 25:

- Article 25 applies to all persons, not just citizens.

Rights under the Article:

- Freedom of Conscience: Guarantees the inner freedom of an individual to form their own beliefs about God or the divine.
- Right to Profess: The freedom to openly declare one's religious beliefs and faith.
- Right to Practice: The freedom to perform religious rituals, ceremonies, and other outward expressions of faith.
- Right to Propagate: The freedom to share one's religious beliefs with others.

Hence option (c) is correct.

Limitations of the Right

- Public Order: The state can restrict religious practices that disturb public order.
- Health and Morality: Religious practices can be restricted if they are detrimental to public health or violate moral standards.
- Social Welfare and Reform: The state retains the power to enact laws for social welfare and reform, even if they affect religious practices.
- Opening of Hindu Temples: Laws can be made to open Hindu religious institutions of a public character to all sections of Hindus, regardless of caste.

PYQ REFERENCE: (2011)

Q. In India, if a religious sect/community is given the status of a national minority, what special advantages it is entitled to?

1. It can establish and administer exclusive educational institutions.
2. The President of India automatically nominates a representative of the community to Lok Sabha.

3. It can derive benefits from the Prime Minister's 15-Point Programme.

Which of the statements given above is/ are correct?

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

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/148461/OPS/GJMESFPC9.1+GTBETJK7D.1.html

12. Central Administrative Tribunal (CAT)

12. Which of the following statements about the Central Administrative Tribunal (CAT) is/are correct?

1. Central Administrative Tribunal (CAT) is a constitutional body established by inserting article 323A under the 42nd Amendment (1976).
2. It is a quasi-judicial body that adjudicates disputes related to the services of public servants.
3. The order of the Central Administrative Tribunal (CAT) cannot be challenged in any court.

Select the correct answer using the code given below:

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

Answer: (b) 2 only

Explanation:

In NEWS: 10th All India Conference of Central Administrative Tribunal to be inaugurated by Chief Justice of India on 20th September at Bharat Mandapam.

The Central Administrative Tribunal (CAT):

- The Central Administrative Tribunal (CAT) plays a crucial role in resolving disputes related to the services of public servants in India.
- It is a statutory body established by an act of **Parliament** under the **Administrative Tribunals Act, 1985**, and empowered by **Article 323A** of the Constitution. **Hence statement 1 is incorrect.**
- CAT provides an alternative to the regular judicial system for service-related matters.

Key Points:

1. **Constitutional Basis:**

Article 323A was inserted by the 42nd Amendment (1976), allowing Parliament to set up administrative tribunals for resolving disputes related to public servants, both for Union and State services (with State approval). **Hence statement 2 is correct.**

2. **CAT is empowered by Article 323A of the Indian Constitution**, which was inserted by the 42nd Amendment Act of

1976. While it is **empowered** by the Constitution, it is **not a "Constitutional body**.

3. **Structure:**

CAT has its headquarters in New Delhi, with 18 additional benches across India. It has 69 members, consisting of:

- o **35 Judicial Members:** These must be former High Court judges.
- o **34 Administrative Members:** These members must have senior service experience, at the level of Additional Secretary or above.

4. **Function:**

- o CAT's primary function is to provide timely and effective justice in cases concerning Union government employees and employees of notified Public Sector Undertakings (PSUs).
- o It adheres to principles of natural justice, maintaining a high disposal rate (92.9%).

5. **Appeals Process:**

- o If a party is dissatisfied with a CAT ruling, they can file a writ petition in a High Court under Articles 226 or 227 of the Constitution.
- o Further appeals can be made to the Supreme Court under Article 136. **Hence statement 3 is incorrect.**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2168512>

13. Criminal Defamation in India

13. With reference to Indian polity, consider the following statements:

1. The constitution of India under the tenth schedule defines defamation as any spoken or written words, signs, or representations that harm a person's reputation.
2. The constitution of India allows reasonable restrictions on freedom of speech and expression in the interests of defamation, public order, sovereignty and integrity of India.
3. Many democratic countries like India have decriminalized defamation.

Which of the statements given above is/are correct?

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

Answer: (b) 2 only

Explanation:

In NEWS: Penalty in proportion: On growing use of criminal defamation proceedings

Criminal Defamation in India

- Defamation means harming the reputation of a person by words (spoken/written), signs, or visible representations.
- It can be **civil** (compensation under law of torts) or **criminal** (punishable under IPC)

Constitutional Angle:

- Article 19(1)(a) guarantees freedom of speech and expression.
- Article 19(2) allows reasonable restrictions in the interests of defamation, public order, sovereignty and integrity of India, etc. **Hence statement 2 is correct.**

Legal Provisions:

- Section 499 of the Indian Penal Code (IPC): Defines criminal defamation as any spoken or written words, signs, or representations that harm a person's reputation. **Hence statement 1 is incorrect.**
- Section 500 of IPC: Punishment – imprisonment up to 2 years, fine, or both.
- Exceptions include statements made in good faith for public good, opinions about public servants, conduct of public questions, etc.

Supreme Court Stand:

- In **Subramanian Swamy v. Union of India (2016)**: SC upheld the constitutional validity of Sections 499–500 IPC.
- The court held that the **right to reputation** is part of **Article 21 (Right to Life and Personal Liberty)**, hence a reasonable restriction on free speech.

Arguments in Favour:

- Protects individuals from malicious attacks.
- Safeguards reputation, which is a facet of dignity.
- Acts as a deterrent against misuse of freedom of speech.

Arguments Against:

- Criminalization has a **chilling effect** on free speech.
- Used as a tool to **harass journalists, critics, and opposition leaders**.
- Civil remedies (compensation) are sufficient without criminal liability.

Global Practice:

- Many democracies (e.g., UK, USA) have **decriminalized defamation**, treating it as a civil wrong.
- India still retains criminal provisions. **Hence statement 3 is incorrect.**

PYQ REFERENCE: (2022)

Q. Consider the following statements:

1. Pursuant to the report of H.N. Sanyal Committee, the Contempt of Courts Act, 1971 was passed.
2. The Constitution of India empowers the Supreme Court and the High Courts to punish for contempt of themselves.
3. The Constitution of India defines Civil Contempt and Criminal Contempt.
4. In India, the Parliament is vested with the powers to make laws on Contempt of Court.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/opinion/editorial/penalty-in-proportion-on-growing-use-of-criminal-defamation-proceedings/article70084730.ece#:~:text=Criminal%20defamation%20is%20incompatible%20with%20democratic%20debate&text=When%20the%20Supreme%20Court%20of,the%20difficulties%20of%20this%20position.>

14. Article 233(2) of the Constitution

14. With reference to Indian judiciary, consider the following statements:

A person is eligible to be appointed a district judge, only if

1. He/She must have at least 10 years of practice as an advocate or pleader.
2. He/She must be recommended by the Supreme Court of India.
3. He/She must already be in judicial service of the Union or the State.

Which of the statements given above is/are correct?

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

Answer: (d) None

Explanation:

In NEWS: SC urged to fill up nearly 5,000 posts in district courts

Article 233 of the Constitution:

(1) Appointments of persons to be, and the posting and promotion of, district judges in any State shall be made by the Governor of the State in consultation with the High Court exercising jurisdiction in relation to such State.

(2) A person not already in the service of the Union or of the State shall only be eligible to be appointed a district judge if he has been for not less than seven years an advocate or a pleader and is recommended by the High Court for appointment.

Eligibility – The clause specifically carves out eligibility for **direct recruitment** from the Bar to the post of District Judge.

- Candidates must have **at least 7 years of practice** as an advocate/pleader.
- Must be **recommended by the High Court**.
- Candidates **must not already be in judicial service** of the Union or the State. **Hence all the statements are incorrect.**

Two sources of recruitment for District Judges:

- **Promotion quota** from the subordinate judicial service (Civil Judges, etc.).
- **Direct recruitment quota** from advocates/pleaders with 7+ years' experience (this is the Bar quota under Article 233(2)).

Judicial interpretation:

- In **Chandramouleswar Prasad v. Patna High Court (1969)**, the SC clarified that consultation with the High Court is mandatory.

● In *Deepak Aggarwal v. Keshav Kaushik (2013)*, the SC held that judicial officers already in service cannot be considered under Article 233(2) for direct recruitment.

○ The Constitution Bench (2024–25 hearings) is revisiting this issue, because officers who were once advocates but later joined judicial service want their past bar experience to be counted.

PYQ REFERENCE: (2021)

Q. With reference to Indian judiciary, consider the following statements:

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with prior permission of the President of India.
2. A High Court in India has the power to review its own judgement as the Supreme Court does.

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

Source:

<https://www.thehindu.com/news/national/supreme-court-urged-to-factor-in-judicial-officers-prior-experience-as-lawyers-to-fill-vacancies/article70089888.ece>

15. The Indian Ports Act, 2025

15. Consider the following statements with respect to the Indian Ports Act, 2025:

1. The Indian Ports Act, 2025 replaces the Indian Ports Act, 1908.
2. Under the Act, the central government establishes the Maritime State Development Council (MSDC), chaired by the Prime Minister.
3. Under the Act, appeals from the Dispute Resolution Committees (DRCs) are directed to the High Court, bypassing civil courts.
4. The Act establishes State Maritime Boards as statutory entities tasked with managing and overseeing non-major ports.

Which of the statements given above are correct?

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

Answer: (b) 1, 3 and 4 only

Explanation:

In NEWS: The Indian Ports Act, 2025 replaces outdated provisions of the Indian Ports Act, 1908, with modern & contemporary regulations.

Key Provisions of the Indian Ports Act, 2025:

● **Replacement of the Indian Ports Act, 1908:** The Bill repeals the outdated Indian Ports Act, 1908, and introduces a comprehensive framework for port management, including

regulations on port operations, fee structures, and environmental safeguards. **Hence statement 1 is correct.**

● **Establishment of the Maritime State Development Council (MSDC):** The central government is required to establish the MSDC, chaired by the Union Minister for Ports, Shipping and Waterways. Other members include state ministers in charge of ports, secretaries of the Indian Navy and Coast Guard, and the secretary of the Union Ministry for Ports, Shipping and Waterways. The MSDC will issue guidelines on data collection, updation, storage, submission, and dissemination related to ports, ensuring transparency in port tariffs. **Hence statement 2 is incorrect.**

● **Empowerment of State Maritime Boards:** State Maritime Boards are recognized as statutory bodies responsible for administering non-major ports. **Hence statement 4 is correct.** They are tasked with overseeing port planning, infrastructure development, licensing, tariff regulation, and enforcement of safety, security, and environmental compliance.

● **Dispute Resolution Mechanism:** State governments must establish Dispute Resolution Committees (DRCs) to adjudicate disputes among non-major ports, concessionaires, port users, and service providers. Appeals from these committees are directed to the High Court, bypassing civil courts. **Hence statement 3 is correct.**

● **Compliance with Global Maritime Conventions:** The Act mandates compliance with international maritime conventions such as MARPOL (International Convention for the Prevention of Pollution from Ships) and the Ballast Water Management Convention. Ports are required to prepare pollution control and disaster management plans, which will be audited periodically by the central government.

● **Tariff Transparency:** The Act emphasizes transparency in port tariffs. It requires the publication of tariffs and charges electronically, ensuring that stakeholders have access to up-to-date information on port fees.

● **Environmental Safeguards:** Ports are mandated to implement measures for pollution control, disaster preparedness, and compliance with environmental standards. The central government is empowered to conduct audits to ensure adherence to these safeguards.

● **Penalties and Enforcement:** The Bill grants port officers, such as the conservator and health officer, powers of entry and inspection. However, the Bill lacks specific provisions for appeal mechanisms against penalties imposed by these officers.

PYQ REFERENCE: (2023)

Q. Consider the following pairs:

Port	Well known as
1. Kamarajar Port	First major port in India registered as a company
2. Mundra Port	Largest privately owned port in India
3. Visakhapatnam	Largest container port in Port India

How many of the above pairs are correctly matched?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2172354>

<https://prsindia.org/billtrack/the-indian-ports-bill-2025#:~:text=The%20Bill%20seeks%20to%20replace,Council%20and%20State%20Maritime%20Boards.>

16. AFSPA Extension

16. With reference to “Armed Forces Special Powers Act” Consider the following statements.

1. In India, both the Centre and the States are empowered to impose AFSPA in a disturbed area.
2. AFSPA is currently in force in J&K, Meghalaya, Tripura, Manipur, and Arunachal Pradesh.
3. The armed forces have been empowered to open fire, enter and search without warrant, and arrest any person and indemnity for the acts.

Which of the statements given above is/are correct?

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

Answer: (c) 1 and 3 only

Explanation:

In NEWS: AFSPA extended in parts of Manipur, Arunachal and Nagaland for another six months

Armed Forces (Special Powers) Act (AFSPA):

- The AFSPA has been in effect in Manipur since 1980, with gradual withdrawals and reintroductions based on the security situation
- Under Section 3 of the Act, Both Central Govt or Governor of State can declare a region as "disturbed area" to impose AFSPA. **Hence statement 1 is correct.**
- AFSPA is currently in force in J&K, parts of Nagaland, Assam, Manipur, and Arunachal Pradesh. **Hence statement 2 is incorrect.**
- It was completely lifted from Meghalaya in April 2018 & Tripura in 2015
- The armed forces have been empowered to open fire; enter and search without warrant, and arrest any person and indemnity for the acts. **Hence statement 3 is correct.**
- Disturbed area is an area in such a disturbed or dangerous condition that the use of armed forces in aid of the civil power is necessary.
- Special powers of the armed forces under Section 4: Any commissioned officer, warrant officer, non-commissioned officer or any other person of equivalent rank in the armed forces is given "special powers" under AFSPA, although they must be exercised with extreme caution.
- After giving due warning as considered necessary, Fire upon or use force, even causing death, against any person acting in contravention of laws:
- Prohibiting assembly of 5 or more persons
- Prohibiting carrying weapons or firearms / ammunition / explosives.

- If reasonable suspicion exists, can also arrest a person without a warrant; enter or search a premises without a warrant
- Unless otherwise authorized by the central government, Army soldiers operating under the AFSPA are shielded from all legal actions.

Source: <https://www.thehindu.com/news/national/mha-extends-afspa-in-parts-of-manipur-arunachal-and-nagaland-for-another-six-months/article70098633.ece>

SCHEMES

17. DIGIPIN Initiative

17. The DIGIPIN system, recently in news, aims to:

- (a) Replace Aadhaar with a new biometric ID system
- (b) Digitally track food grain movement under the PDS
- (c) Provide unique geo-coded digital addresses for precise location identification
- (d) Digitize land records in rural areas

Answer: (c) Provide unique geo-coded digital addresses for precise location identification

Explanation:

In NEWS: Department of Posts Signs MoU with ESRI India to Strengthen the DIGIPIN Initiative

DIGIPIN Initiative:

- **DIGIPIN (Digital Postal Index Number)** is a **geo-coded digital addressing system** launched by the **Department of Posts**, Government of India. **Hence option (c) is correct.**
- It aims to provide **precise digital addresses** using a grid-based mapping system that divides India into **4 m × 4 m** squares, each with a unique DIGIPIN.
- DIGIPIN enables **accurate location identification**, improving **postal services, emergency response, logistics, e-commerce, and governance.**
- The initiative supports the goals of the **National Geospatial Policy, 2022** by promoting the use of open geospatial data and digital addressing.
- The DIGIPIN system was developed in collaboration with **IIT Hyderabad.**
- A citizen-facing web portal, “**Apna Digipin Jaane,**” was launched in **May 2025** to allow users to look up their DIGIPIN based on coordinates or traditional addresses.
- In **July 2025**, a new feature was introduced allowing users to combine DIGIPIN with conventional address elements to create a **composite Digital Address.**
- On **September 1, 2025**, the Department of Posts signed an **MoU with Esri India Technologies Pvt. Ltd.** to enhance the DIGIPIN system.
- Under the MoU, **Esri India** will provide:
 - High-resolution satellite imagery and street-level basemaps,
 - Integration of DIGIPIN into Esri’s **Living Atlas**, and
 - Technical support for improved GIS capabilities.
- This integration is expected to boost DIGIPIN’s adoption among the **GIS community, urban planners, logistics operators, and public service departments.**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2162858>

18. 'Swasth Nari, Sashakt Parivar Abhiyaan'

18. Consider the following:

1. Strengthen access to quality health services for women and children.
2. Integrate the campaign with nutrition initiatives, menstrual hygiene, balanced diet awareness and anaemia prevention.
3. Early detection and management of diseases like non-communicable diseases, tuberculosis, sickle cell disease, and cancers relevant to women.
4. Mobilise community engagement, awareness and behaviour change.

Which of the above are the objectives of the "Swasth Nari, Sashakt Parivar Abhiyaan"?

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

Answer: (d) 1, 2, 3 and 4

Explanation:

In NEWS: PM to launch campaign for women and child healthcare

"Swasth Nari, Sashakt Parivar Abhiyaan":

- It is a national health & nutrition campaign launched by the Government of India focused on women's, adolescent girls' and children's health.
- The name means "Healthy Woman, Empowered Family Campaign".
- Scheduled to run from 17 September to 2 October 2025
- It will involve 75,000 to 100,000 health camps across the country at various health facilities like Ayushman Arogya Mandirs, Community Health Centres, District Hospitals etc.

Objectives / Aims:

- Strengthen access to quality health services for women and children, including preventive, promotive, and curative services.
- Integrate the campaign with nutrition (Poshan) initiatives, menstrual hygiene, balanced diet awareness, anaemia prevention, etc.
- Early detection and management of diseases like non-communicable diseases (e.g. hypertension, obesity), tuberculosis, sickle cell disease, and cancers relevant to women (breast, cervical).
- Mobilise community engagement, awareness, and behaviour change in matters of health, nutrition, lifestyle, and hygiene.

Hence option (d) is correct.

Key Features / Components:

- Integration with Poshan Maah under the Ministry of Women & Child Development to boost nutrition awareness and practices.

- Special camps and services for things like antenatal care, immunisation, nutrition counselling, menstrual hygiene, lifestyle/mental health awareness.
- Emphasis on participation by various stakeholders: Anganwadi workers, ASHA workers, ANMs, Self-Help Groups, Panchayati Raj Institutions (PRIs), youth volunteers, private hospitals etc.
- The Ministry of Ayush is also participating to provide holistic health practices including wellness, yoga, herbal/alternative medicine components.

Significance / Expected Outcomes:

- Reduce health & nutrition gaps among women and children.
- Improve early detection of diseases, better maternal and child health outcomes.
- Empower women health-wise, leading to stronger families and healthier communities.
- Help in achieving larger health goals/targets (such as those under SDGs) with synergistic convergence.

PYQ REFERENCE: (2016)

Q. 'Rashtriya Garima Abhiyaan' is a national campaign to

- (a) rehabilitate the homeless and destitute persons and provide them with suitable sources of livelihood
- (b) release the sex workers from their practice and provide them with alternative sources of livelihood
- (c) eradicate the practice of manual scavenging and rehabilitate the manual scavengers
- (d) release the bonded labourers from their bondage and rehabilitate them

Source: [https://www.thehindu.com/sci-tech/health/pm-to-launch-swasth-nari-sashakt-parivar-abhiyaan-and-eighth-poshan-maah/article70052404.ece#:~:text=To%20strengthen%20healthcare%20and%20nutrition,nutrition%20month\)%20on%20September%202017](https://www.thehindu.com/sci-tech/health/pm-to-launch-swasth-nari-sashakt-parivar-abhiyaan-and-eighth-poshan-maah/article70052404.ece#:~:text=To%20strengthen%20healthcare%20and%20nutrition,nutrition%20month)%20on%20September%202017)

19. Frontier 50 Initiative

19. Which one of the following is the correct description of the Frontier 50 Initiative?

- (a) A skill development program launched by the Ministry of Education for training 50,000 youth in AI and robotics.
- (b) A nationwide skilling initiative launched by the Ministry of Education aimed at training 50,000 students from rural areas in frontier technologies such as artificial intelligence, robotics, and blockchain to boost employment in the tech sector.
- (c) An initiative to accelerate the adoption of frontier technologies in 50 Aspirational Districts or Blocks, leveraging proven use cases from across India to saturate service delivery in key development areas.
- (d) A recognition scheme under the Startup India framework that awards and funds 50 emerging startups working on next-generation technologies including quantum computing, AI, and space tech, with the objective of enhancing India's global competitiveness in deep tech innovation.

Answer: (c) An initiative to accelerate the adoption of frontier technologies in 50 Aspirational Districts or Blocks, leveraging proven use cases from across India to saturate service delivery in key development areas.

Explanation:

In NEWS: Initiatives launched under Frontier Tech Hub towards Accelerating India's Transformation to Viksit Bharat by 2047

Frontier 50 Initiative:

- NITI Aayog under its Frontier Tech Hub, on 15 September 2025, as part of the "AI for Viksit Bharat" roadmap.
- The initiative aims to accelerate the adoption of frontier technologies in 50 Aspirational Districts or Blocks, leveraging proven use cases from across India to saturate service delivery in key development areas. **Hence option (c) is correct.**

Key Features:

- Selection of 50 Aspirational Districts/Blocks
- NITI Aayog will identify and support 50 districts or blocks from the Aspirational Districts Programme (ADP) or Aspirational Blocks Programme (ABP).
- Districts will pick real-world tech use cases from the Frontier Tech Repository (which showcases 200+ impact stories).
- These include innovations in Agriculture, Healthcare, Education, and National Security.
- Focus on AI, machine learning, digital public infrastructure (DPI), IoT, and other emerging technologies that have demonstrated impact.

Goal: Saturation of Services

Aim to accelerate 100% coverage of services under themes like health, nutrition, education, livelihoods, etc., using technology as a multiplier.

NITI Frontier Tech Impact Awards:

- Recognizes 3 top-performing states that have shown excellence in tech-driven governance and service delivery.
- Supports them in scaling and replicating successful models.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2166867>

20. The National Logistics Policy (NLP)

20. Which among the following initiatives are part of the National Logistics Policy (NLP)?

1. LEAPS initiative to promote innovation and green logistics.
2. Sectoral Policy for Efficient Logistics (SPEL).
3. Multimodal Logistics Parks (MMLPs).
4. Make in India 2.0 campaign.

Select the correct answer using the code given below:

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

Answer: (a) 1, 2 and 3 only

Explanation:

In NEWS: India Marks Three Years of National Logistics Policy: Transforming India's Supply Chain Ecosystem

The National Logistics Policy (NLP):

- The **National Logistics Policy (NLP)** was launched on **17 September 2022** by the Prime Minister.
- It is implemented by the **Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry.**
- The policy aims to **reduce logistics costs to global benchmarks** and improve India's ranking in the **Logistics Performance Index (LPI) to top 25 by 2030.**
- NLP is aligned with the **PM GatiShakti National Master Plan** for integrated infrastructure and multimodal transport.
- The **Unified Logistics Interface Platform (ULIP)** integrates 30+ digital systems and has enabled **160 crore+ digital transactions.**
- The **Logistics Data Bank** provides real-time tracking of **75 million EXIM containers across 101 ICDS.**
- The **LEADS Index** (Logistics Ease Across Different States) evaluates state-level logistics performance.
- The **LEAPS initiative** promotes innovation in logistics, including MSMEs, startups, academia, and encourages green logistics. **Hence 1 is correct.**
- **Multimodal Logistics Parks (MMLPs)** are being developed as hubs integrating transport, customs, and storage. **Hence 3 is correct.**
- **Sectoral Policy for Efficient Logistics (SPEL)** provides sector-specific frameworks for industries like coal, steel, cement, and food processing. **Hence 2 is correct.**
- NLP emphasizes **skill development**, with universities and institutes offering logistics courses in collaboration with GatiShakti Vishwavidyalaya.
- The policy promotes **green logistics** through tools like the **Transportation Emissions Measurement Tool (TEMT)** aligned with global standards.
- Many **States and UTs have adopted State Logistics Policies and Action Plans** under NLP.
- Key challenges remain in **infrastructure gaps, regulatory harmonization, and digital literacy among small operators.**

Note: Make in India 2.0 campaign is a separate flagship initiative, not part of NLP. Hence 4 is incorrect.

PYQ REFERENCE: (UPSC CAPF AC 2024)

Q. Which of the following statements with regard to National Logistics Policy (NLP) is NOT correct?

- (a) NLP was launched in 2022
- (b) NLP would improve the competitiveness of Indian goods
- (c) NLP would enhance economic growth and increase employment opportunities
- (d) NLP would provide an opportunity for deleveraging balance sheets and providing fiscal space for investment in new infrastructure assets

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2167224>

21. PM Vishwakarma scheme

21. Consider the following statements with respect to PM Vishwakarma scheme:

- I. PM Vishwakarma is a central government scheme launched to support traditional artisans and craftspeople in India.
- II. The scheme facilitates access to collateral-free credit, with interest subvention.
- III. Artisan/crafts-persons below the age of 18 are also benefitted under the scheme.

Which of the statements given above is/are correct?

- (a) I and II
- (b) II only
- (c) I and III
- (d) None of the above statements is correct

Answer: (a) I and II

Explanation:

In NEWS: Gujarat trains 1.81 lakh artisans under PM scheme in two years

PM Vishwakarma scheme:

- PM Vishwakarma is a central government scheme launched to support traditional artisans and craftspeople in India. **Hence statement I is correct.**
- The scheme aims to preserve and promote age-old skills passed down through generations.
- It provides financial assistance, skill training, and access to modern tools and technology.
- The scheme covers 18 traditional trades like carpenter, blacksmith, goldsmith, potter, cobbler, barber, washerman, and tailor.

Scheme Objectives and Key Features

- Provide holistic support for traditional artisans and craftspeople (Vishwakarmas) to scale up their products/services.
- Recognise artisans through certification and ID card.
- Skill upgradation: training opportunities to improve quality and relevance.
- Supply modern/better tools to enhance productivity and product quality.
- Facilitate access to collateral-free credit, with interest subvention. **Hence statement II is correct.**
- Incentivise digital transactions.
- Provide marketing support: platform for branding, quality certification, market linkages, trade fairs etc.

Eligibility Criteria

- Must be an artisan/crafts-person working with hands and tools in one of 18 traditional family-based trades (unorganised sector, self-employed).
- Minimum age 18 years. **Hence statement III is incorrect.**
- Should be engaged in that trade at the time of registration.
- Must not have taken loans under similar credit-based schemes (Central or State govt) in the past 5 years (schemes like PMEGP, PM SVANidhi, Mudra etc).

- Only one family member (husband/wife/unmarried children) can avail benefits.
- Government employees and their family members are not eligible.

Eligible Trades under the scheme:

- Wood based: Carpenter, Boat Maker
- Iron/Metal/Stone based: Blacksmith, Locksmith, Sculptor, Armourer, etc.
- Gold/Silver based: Goldsmith
- Clay based: Potter
- Leather based: Cobbler / Footwear artisan
- Others: Tailor, Barber, Washerman, Basket/Mat/Broom Maker, Doll & Toy Maker etc.

Source: https://epaper.thehindu.com/ccidistws/th/th_international/issues/148461/OPS/GJMESFPBM.1+GTBETJDIU.1.html
<https://pmvishwakarma.gov.in/>

22. National Policy on Geothermal Energy 2025

22. With reference to the 'National Policy on Geothermal Energy 2025' consider the following statements:

- I. The National Policy on Geothermal Energy 2025 is launched by the Ministry of New and Renewable Energy (MNRE).
- II. It aims to promote exploration, research, development, and deployment of geothermal energy in India.
- III. It also encourages 100% FDI, Viability Gap Funding (VGF), and tax incentives for geothermal projects.

Which of the statements given above is/are correct?

- (a) I and III only
- (b) II only
- (c) II and III only
- (d) I, II and III

Answer: (d) I, II and III

Explanation:

In NEWS:

National Policy on Geothermal Energy 2025:

- The **National Policy on Geothermal Energy 2025** has been launched by the **Ministry of New and Renewable Energy (MNRE)**. **Hence statement I is correct.**
- The policy aims to promote **exploration, research, development, and deployment** of geothermal energy in India. **Hence statement II is correct.**
- It seeks to diversify India's **renewable energy mix** and support the country's commitment to achieve **Net-Zero by 2070**.
- The estimated **geothermal potential in India is about 10.6 GW**, as identified by the Geological Survey of India (GSI).
- The GSI has mapped **381 hot springs** in the country, with surface temperatures ranging between **35°C to 89°C**.
- The major geothermal provinces in India include:

- **Himalayan Geothermal Province** (Uttarakhand, Himachal Pradesh, Ladakh, J&K, Arunachal Pradesh)
- **Cambay Graben** (Gujarat – especially using abandoned oil wells)
- **Andaman & Nicobar Islands**
- The policy encourages **100% FDI, Viability Gap Funding (VGF), and tax incentives** for geothermal projects. **Hence statement III is correct.**
- It promotes **local R&D and innovation** to reduce high costs associated with drilling and reservoir management.
- Challenges include:
 - **High upfront capital cost**
 - **Exploration risk and site specificity**
 - **Lack of advanced technology and expertise**
- Implementation requires close coordination among **MNRE, State Governments, Ministry of Petroleum & Natural Gas, and local authorities.**

PYQ REFERENCE: (2019)

Q. In the context of which one of the following are the terms 'pyrolysis and plasma gasification' mentioned?

- (a) Extraction of rare earth elements
- (b) Natural gas extraction technologies
- (c) Hydrogen fuel-based automobiles
- (d) **Waste-to-energy technologies**

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-national-policy-on-geothermal-energy-2025-upsc-10259059/>

23. PRAGATI

23. Which of the following statements best describes the term 'PRAGATI', recently seen in the news?

- (a) A digital platform for real-time governance review by bringing together the Prime Minister, Union Secretaries, and State Chief Secretaries.
- (b) A rural development scheme aimed at promoting self-help groups and microfinance.
- (c) An initiative to promote renewable energy and green technology in urban areas.
- (d) A parliamentary committee for assessing financial performance of central ministries.

Answer: (a) A digital platform for real-time governance review by bringing together the Prime Minister, Union Secretaries, and State Chief Secretaries.

Explanation:

In NEWS: PM Chairs 49th PRAGATI Meeting

- The Prime Minister chaired the 49th edition of PRAGATI (Pro-Active Governance And Timely Implementation).
- Eight key infrastructure projects from sectors such as **Mines, Railways, Water Resources, Industrial Corridors, and Power.**
- Projects spread across **15 States/UTs** with a total investment of over **₹65,000 crore.**

PRAGATI - Pro-Active Governance And Timely Implementation:

● It is an ICT-based, multi-purpose, multi-modal platform launched by the Prime Minister of India in 2015.

● **Objective:** To bring together the Prime Minister, Union Secretaries, and Chief Secretaries of the States on one platform for **real-time governance review.** **Hence option (a) is correct.**

Functions:

1. Monitors implementation of **flagship programmes and schemes.**

2. Tracks **projects involving investments above ₹500 crore.**

3. Reviews **public grievances and complaints** received through the CPGRAMS (Centralised Public Grievance Redress and Monitoring System).

Technology Used:

● Combines **video-conferencing, data management, and digital monitoring tools.**

● Enables the PM to directly interact with Central and State officials.

Impact:

● Faster resolution of bottlenecks in infrastructure projects.

● Enhances **accountability and transparency.**

● Helps improve **Centre-State coordination.**

PYQ REFERENCE:

Q. Which of the following statements best describes the term 'Scheme for Sustainable Structuring of Stressed Assets (S4A)', recently seen in the news?

- (a) It is a procedure for considering ecological costs of developmental schemes formulated by the Government.
- (b) **It is a scheme of RBI for reworking the financial structure of big corporate entities facing genuine difficulties.**
- (c) It is a disinvestment plan of the Government regarding Central Public Sector Undertakings.
- (d) It is an important provision in 'The Insolvency and Bankruptcy Code' recently implemented by the Government.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2170926>

24. NAVYA

24. With reference to the 'NAVYA' initiative, consider the following statements:

1. It aimed at equipping adolescent girls aged 16–18 years.
2. It requires a minimum qualification of Class 10, with vocational training mainly in non-traditional job roles.
3. It is a pilot initiative of the Ministry of Social Justice and Empowerment.

Which of the statements given above is/are correct?

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

Answer: (b) 1 and 2 only

Explanation:

In NEWS: Empowering Adolescent Girls for a Viksit Bharat

NAVYA – Nurturing Aspirations through Vocational Training for Young Adolescent Girls:

● The **Ministry of Women and Child Development (MWCD)**, in convergence with **Ministry of Skill Development and Entrepreneurship (MSDE)**, will launch the joint pilot initiative of both the Ministries for Skilling of Adolescent Girls NAVYA – Nurturing Aspirations through Vocational Training for Young Adolescent Girls. **Hence statement 3 is incorrect.**

● NAVYA is a pilot initiative aimed at equipping adolescent girls aged 16–18 years with a **minimum qualification of Class 10**, with vocational training mainly in non-traditional job roles. **Hence statements 1 and 2 are correct.**

● This pilot initiative will be implemented in 27 Districts of the country which include Aspirational districts and districts of North eastern States spanning across 19 States, reflecting the Government's inclusive and targeted approach to reaching underserved regions and vulnerable populations.

● As part of the launch, both Ministries will formalize their collaboration to institutionalize convergence on skilling efforts for adolescent girls.

● The programme will draw upon the strengths of Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and other flagship skill development schemes.

● The launch event will feature interactions with adolescent girl trainees, distribution of PMKVY and PM Vishwakarma certificates.

● Through NAVYA, Government of India will reaffirm its commitment to empowering girls with skills, confidence, and opportunities—ensuring that every young woman becomes a catalyst in India's journey towards a developed, self-reliant, and inclusive future.

PYQ REFERENCE: (2018)

Q. With reference to Pradhan Mantri Kaushal Vikas Yojana, consider the following statements:

1. It is the flagship scheme of the Ministry of Labor and Employment.
2. It, among other things, will also impart training in soft skills, entrepreneurship, financial and digital literacy.
3. It aims to align the competencies of the unregulated workforce of the country to the National Skill Qualification Framework.

Which of the statements given above is/are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2172356>

25. ECINET

Q. The 'ECINET', a e-sign feature recently launched by the Election Commission of India is aimed at:

- (a) Facilitating electronic voting for overseas voters.
- (b) Preventing fraudulent addition or deletion of names in the electoral roll.
- (c) Enabling blockchain-based digital voting.
- (d) Linking Voter ID with PAN for tax compliance.

Answer: (b) Preventing fraudulent addition or deletion of names in the electoral roll.

Explanation:

In NEWS: Election Commission launches e-sign feature for addition, deletion, and correction of voter names

ECINET:

● Election Commission of India (ECI) launched an **e-sign authentication feature** in ECINET for voter list addition, deletion, and correction.

● It uses **Aadhaar-based OTP verification** for applicants through their Aadhaar-linked mobile number.

● Ensures that only genuine voters can request changes to the electoral roll.

● ECINET is a **unified digital platform** integrating more than 40 ECI applications for voters, officials, and stakeholders.

● Initially piloted in select states during by-elections; nationwide rollout started in September 2025.

Significance:

● **Prevents fraudulent voter roll manipulations** like fake deletions or multiple additions. **Hence option (b) is correct.**

● **Strengthens electoral integrity** by creating a digital audit trail of applications.

● Promotes **citizen convenience and digital governance** by enabling remote, paperless services.

● Enhances **transparency and accountability** in electoral roll management.

Challenges & Concerns:

● **Digital divide** may exclude citizens without Aadhaar-linked mobiles or digital literacy.

● **Privacy risks** due to linking voter services with Aadhaar and mobile authentication.

● **Dependence on Aadhaar ecosystem and telecom networks** could cause delays or mismatches

● **Need for fallback mechanisms** for those unable to use e-sign.

● **Administrative and legal challenges** in ensuring uniform, inclusive implementation.

Source: <https://www.thehindu.com/elections/eci-launches-e-sign-feature-for-addition-deletion-correction-of-voter-names/article70089365.ece>

26. Mukhyamantri Mahila Rojgar Yojana

26. With reference to the 'Mukhyamantri Mahila Rojgar Yojana' consider the following statements:

1. It aims to promote self-employment and small-scale entrepreneurship among women, especially from rural and economically weaker sections.
2. Women above 25 years, usually below a defined income threshold are only eligible for the scheme.

Which of the statements given above is/are correct?

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

Answer: (a) 1 only

Explanation:

In NEWS: Modi unveils scheme for women in Bihar, criticises RJD's reign

Mukhyamantri Mahila Rojgar Yojana (MMRY):

● **Mukhyamantri Mahila Rojgar Yojana (MMRY)** is a **women-focused employment and entrepreneurship scheme** launched by various Indian states (for example, Uttar Pradesh) to empower women economically.

● **Aim:** To **promote self-employment and small-scale entrepreneurship** among women, especially from **rural and economically weaker sections**. **Hence statement 1 is correct.**

● Provides **financial assistance**, skill development, and **subsidy support** for setting up small businesses or micro-enterprises.

● **Eligibility:** Women above 18 years, usually below a defined income threshold, and in some cases, members of **Self Help Groups (SHGs)**. **Hence statement 2 is incorrect.**

● **Financial Assistance:** Subsidy or loan support ranging from **Rs. 10,000 to Rs. 50,000** depending on the nature of the enterprise.

● **Skill Development:** Training programs in trades like **tailoring, handicrafts, food processing, and small-scale manufacturing**.

● **Objective:** Promote **women entrepreneurship, self-reliance, and employment generation**, reducing dependence on wage labor.

PYQ REFERENCE: (2024)

Q. With reference to the 'Pradhan Mantri 'Surakshit Matritva Abhiyan', consider the following statements:

1. This scheme guarantees a minimum package of antenatal care services to women in their second and third trimesters of pregnancy and six months postdelivery health care service in any government health facility
2. Under this scheme, private sector health care providers of certain specialities can volunteer to provide services at nearby government health facilities.

Which of the statements given above is/are correct?

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

Source: <https://www.newsonair.gov.in/pm-modi-inaugurates-mukhyamantri-mahila-rojgar-yojana-via-video-conferencing-from-new-delhi/>

SCIENCE & TECHNOLOGY

27. Aadi Vaani

27. 'Aadi Vaani', recently seen in the news is a/an

- (a) AI-based translation model and mobile app for Indian tribal languages.
(b) Indigenous medicinal plant used in traditional tribal healing practices.
(c) Government initiative for providing digital education in tribal schools.
(d) Cultural festival celebrated by tribal communities in central India.

Answer: (a) AI-based translation model and mobile app for Indian tribal languages.

Explanation:

In NEWS: Adivasi languages translation app to be launched

Aadi Vaani:

● Aadi Vaani is an **AI-based translation model and mobile app for Indian Adivasi (tribal) languages**.

● Its Beta version was released on Monday, September 1, 2025.

● It is developed by the Ministry of Tribal Affairs in collaboration with IIT Delhi, BITS Pilani, IIIT Hyderabad & IIIT Naya Raipur and tribal research institutes and community experts.

● The app gathered sources from Community folklore, traditional songs, and public speeches.

● Uses Large Language Model (LLM) trained on multilingual content.

● Beta app will be on Google Play Store and Apple App Store.

● The app translates speech and text between Hindi, English, and six Adivasi languages:

- Bhili (Bhilodi) – ~1.04 crore speakers
- Santali – ~73.68 lakh speakers
- Gondi – ~29.84 lakh speakers
- Mundari – ~11.28 lakh speakers
- Kui – ~9.41 lakh speakers
- Garo – ~11.45 lakh speakers

Significance:

● Promotes digital inclusion for tribal communities.

● Aims to preserve and empower endangered indigenous languages.

● Bridges linguistic gaps in education, governance, and community engagement.

Source: [https://www.thehindu.com/news/national/govt-to-launch-ativasi-languages-translation-app/article69984532.ece#:~:text=Aadi%20Vaani%2C%20the%20Union%20government's,%2C%202025\)%2C%20officials%20said.](https://www.thehindu.com/news/national/govt-to-launch-ativasi-languages-translation-app/article69984532.ece#:~:text=Aadi%20Vaani%2C%20the%20Union%20government's,%2C%202025)%2C%20officials%20said.)

28. Exercise Yudh Kaushal 3.0

28. The primary objective of Exercise Yudh Kaushal 3.0 was to:

- (a) Test India's nuclear response readiness
- (b) Conduct amphibious landing drills with Navy and Coast Guard
- (c) Validate integrated battle group (IBG) operations in high-altitude terrain
- (d) Conduct urban warfare simulation in metro cities

Answer: (c) Validate integrated battle group (IBG) operations in high-altitude terrain

Explanation:

In NEWS: Indian Army tests combat readiness in Arunachal Pradesh

Exercise Yudh Kaushal 3.0:

- Exercise Yudh Kaushal 3.0 is a high-altitude military exercise conducted by the Indian Army's Gajraj Corps in the **Kameng Sector of Arunachal Pradesh**.
- The 2024 iteration focused on validating **Integrated Battle Group (IBG) operations**, enhancing all-weather combat readiness, and showcasing multi-domain capabilities, including drone surveillance, AI-driven systems, and indigenous defence technologies under the Aatmanirbhar Bharat initiative. **Hence option (c) is correct.**
- The exercise aimed to simulate real-time battlefield scenarios in extreme terrain and weather, ensuring rapid mobility, coordination, and technological integration for future conflicts, especially in Eastern Command's operational areas along the Line of Actual Control (LAC).

PYQ REFERENCE: (2024)

Q. Which of the following statements about 'Exercise Mitra Shakti-2023' are correct?

1. This was a joint military exercise between India and Bangladesh
2. It commenced in Aundh (Pune).
3. Joint response during counter-terrorism operations was a goal of this operation.
4. Indian Air Force was a part of this exercise.

Select the answer using the code given below:

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

Source:

<https://www.thehindu.com/news/national/exercise-yudh-kaushal-30-demonstrates-next-gen-combat-readiness-in-eastern-himalayas/article69995845.ece>

29. CEREBRO

29. What is the core technology used in CEREBRO, the handheld device developed for rapid brain injury diagnosis?

- (a) Functional MRI with neural mapping
- (b) Near-Infrared Spectroscopy (NIRS) integrated with machine learning
- (c) X-ray fluorescence and Doppler imaging
- (d) Electromagnetic pulse imaging with contrast agents

Answer: (c) Near-Infrared Spectroscopy (NIRS) integrated with machine learning

Explanation:

In NEWS: ICMR pushes for made-in-India handheld that can detect brain bleeds in 2 mins. All about CEREBRO

- **CEREBRO** is a portable handheld device that uses **Near-Infrared Spectroscopy (NIRS)** combined with **machine learning** to rapidly and non-invasively diagnose traumatic brain injuries (TBI) like intracranial bleeding and brain edema. **Hence option (b) is correct.**
- NIRS emits near-infrared light into brain tissue, detecting changes in absorption caused by oxygenated and deoxygenated haemoglobin.
- Injured areas alter these patterns, which the device's AI analyzes in real time to provide color-coded, radiation-free results within a minute—vital for emergency care.
- Unlike bulky, expensive CT scans or MRIs that require radiation or magnetic fields, CEREBRO is battery-operated and safe for vulnerable groups such as infants and pregnant women. Its portability and ease of use make it ideal for rural and low-resource settings lacking advanced neuroimaging infrastructure.
- By integrating advanced optical technology with AI, CEREBRO democratizes brain injury diagnosis, enhancing timely intervention and healthcare accessibility across India and beyond.

PYQ REFERENCE:

Q. In addition to fingerprint scanning, which of the following can be used in the biometric identification of a person?

1. Iris scanning
2. Retinal scanning
3. Voice recognition

Select the correct answer using the code given below.

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

Source: <https://theprint.in/health/icmr-pushes-for-made-in-india-handheld-that-can-detect-brain-bleeds-in-2-mins-all-about-cerebro/2723406/>

30. SEMICON India - 2025

30. With reference to the “SEMICON India - 2025” and India’s semiconductor mission, consider the following statements:

1. The India Semiconductor Mission (ISM) functions as an autonomous body under the Ministry of Electronics and Information Technology.
2. SEMICON India - 2025 aims to promote a comprehensive semiconductor ecosystem including High-Volume Fabs, Compound Semiconductors, OSATs, and 3D Packaging.
3. The Design Linked Incentive (DLI) scheme has approved start-ups and academic institutes working on critical semiconductor applications.

Which of the statements given above are correct?

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

Answer: (c) 1, 2 and 3

Explanation:

In NEWS: Prime Minister Shri Narendra Modi inaugurates Semicon India 2025 in New Delhi

● The **India Semiconductor Mission (ISM)** functions as an **autonomous body** under the **Ministry of Electronics and Information Technology (MeitY)**. **Hence Statement 1 is correct**

● It is the **nodal agency** responsible for implementing the **Semicon India Programme**, managing fiscal incentives, evaluating proposals, and facilitating partnerships with both domestic and international stakeholders.

● **SEMICON India - 2025** specifically focuses on promoting a **comprehensive semiconductor ecosystem**, including:

- **High-Volume Fabrication Units (Fabs)**
- **Compound Semiconductors** (including Silicon Carbide - SiC)
- **3D Heterogeneous Packaging**
- **Outsourced Semiconductor Assembly and Test (OSATs)**
- These are key strategic components of the **10 approved projects** under the Government’s initiative. **Hence Statement 2 is correct**

● The **Design Linked Incentive (DLI)** scheme has been approved: **23 start-ups** working on critical semiconductor applications like CCTV systems, navigation systems, motor controllers, communication chips, and microprocessor units. **Hence Statement 3 is correct**

● Additionally, **280 academic institutions** and **72 start-ups** have been provided with **state-of-the-art design tools**, enhancing R&D capabilities.

PYQ REFERENCE: (2018)

Q. With reference to Pradhan Mantri Kaushal Vikas Yojana, consider the following statements:

1. It is the flagship scheme of the Ministry of Labour and Employment.
2. It, among other things, will also impart training in soft skills,

entrepreneurship, financial and digital literacy.
3. It aims to align the competencies of the unregulated workforce of the country to the National Framework. Skill Qualification

Which of the statements given above is/are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2162980>

31. DISCOMS

31. With reference to Distribution Companies (Discoms) in India, consider the following statements:

1. Discoms are primarily responsible for the last-mile supply of electricity to consumers.
2. The Ujwal Discom Assurance Yojana (UDAY) was launched to improve the financial health of Discoms.
3. Cross-subsidization in electricity pricing often results in higher tariffs for industrial users to keep agricultural and residential tariffs lower.
4. Electricity distribution is listed under the Union List of the Constitution.

Which of the statements given above is/are correct?

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

Answer: (a) 1, 2 and 3 only

Explanation:

In NEWS: SC orders DISCOMS to clear their regulatory assets | Explained

DISCOMS:

● Distribution Companies (Discoms) are the final link in India’s power supply chain, ensuring electricity reaches households, industries, and agriculture. **Thus, Statement 1 is correct**, as their role is primarily last-mile delivery.

● However, these entities often face financial crises due to high Aggregate Technical and Commercial (AT&C) losses, poor billing efficiency, and political pressures to keep tariffs low.

● To address this, the government launched the Ujwal Discom Assurance Yojana (UDAY) in 2015, which aimed to restructure debt, reduce interest costs, and mandate efficiency improvements. **This makes Statement 2 correct.**

● While UDAY provided short-term relief, many Discoms again slipped into financial stress, leading to newer reforms like the Revamped Distribution Sector Scheme (RDSS, 2021).

● A critical issue for Discoms is cross-subsidization. Industrial and commercial users are charged higher tariffs so that farmers and households can get subsidized or free power. This distortion

discourages industries, adds to inefficiency, and contributes to revenue gaps—hence **Statement 3 is correct.**

● Regarding the constitutional aspect, **Statement 4 is incorrect.** Electricity is a subject under the Concurrent List (Entry 38, Seventh Schedule), not the Union List. This means both the Centre and States have powers to legislate on it, though distribution largely remains with the States. **Therefore, the correct answer is (a) 1, 2 and 3 only.**

PYQ REFERENCE: (2016)

Q. Which one of the following is a purpose of 'UDAY', a scheme of the Government?

- (a) Providing technical and financial assistance to startup entrepreneurs in the field of renewable sources of energy
- (b) Providing electricity to every household in the countries by 2018
- (c) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
- (d) Providing for financial turnaround and revival of power distribution companies

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/sc-orders-discoms-to-clear-their-regulatory-assets-explained/article69999325.ece>

32. MAITREE-XIV

32. With reference to Exercise MAITREE-XIV held in 2025, consider the following statements:

1. It is a joint military exercise between India and Bangladesh.
2. It focuses on joint counter-terrorism military drill operations in semi-urban terrain.

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

Answer: (b) 2 only

Explanation:

In NEWS: The 14th edition of the India–Thailand joint military exercise, MAITREE-XIV, commenced on Monday (September 1, 2025) with a ceremonial opening at the Joint Training Node, Umroi in Meghalaya. The exercise will run from September 1 to 14.

MAITREE-XIV:

- MAITREE-XIV is the **14th edition** of the **India–Thailand joint military exercise**, first initiated in **2006**. **Hence statement 1 is incorrect.**
- The 2025 edition is being held at the **Joint Training Node (JTN), Umroi, Meghalaya, from September 1 to 14, 2025.**
- The exercise involves **120 personnel** from the **Indian Army's Madras Regiment** and **53 personnel** from the **Royal Thai Army's 1st Infantry Battalion, 14th Infantry Brigade.**
- The theme of the exercise is **counter-terrorism operations in semi-urban terrain**, conducted under the mandate of

Chapter VII of the UN Charter (related to peace enforcement operations). **Hence statement 2 is correct.**

- Training modules include:
 - Tactical drills and combat simulations
 - Joint planning and execution
 - Physical fitness and obstacle training
 - Use of special arms and equipment
 - **48-hour validation exercise** simulating real-time joint operations
- The exercise aims to:
 - Enhance **interoperability** between the two armies
 - Improve **joint operational readiness**
 - Strengthen **bilateral defence cooperation**
 - Promote **regional peace and security**
- The **13th edition** of Exercise Maitree was held in **Tak Province, Thailand**, showcasing the rotational nature of the exercise between the two nations.
- The geographical setting of **Meghalaya**, with its semi-urban and hilly terrain, provides a realistic environment for **counter-terrorism and peacekeeping simulations.**
- MAITREE is one of the most significant components of India's **bilateral military diplomacy** with Southeast Asian nations, aligned with India's **Act East Policy.**

Source: <https://www.thehindu.com/news/national/india-thailand-armies-begin-joint-exercise-in-meghalaya/article70004997.ece>

33. Two-factor authentication (2FA)

33. Consider the following:

1. SMS-based one-time passwords (OTP)
2. App-based authenticators
3. Biometric verification
4. Hardware tokens

How many of the above are the common two-factor authentication (2FA)?

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

Answer: (d) All four

Explanation:

In NEWS: How does two-factor authentication (2FA) work?

Two-Factor Authentication (2FA):

- **2FA is a security mechanism** that requires users to provide two distinct forms of identification before accessing an account or system.
- The two factors are typically drawn from **three categories:**
 - Something you *know* (e.g., password or PIN)
 - Something you *have* (e.g., OTP, smart card, mobile device)
 - Something you *are* (e.g., fingerprint, facial recognition)
- **Purpose:** To enhance digital security by reducing the risk of unauthorized access due to compromised passwords.

● **Common 2FA Methods:**

- SMS-based one-time passwords (OTP)
- App-based authenticators (e.g., Google Authenticator, Authy)
- Biometric verification (e.g., fingerprint, iris scan)
- Hardware tokens (e.g., YubiKey). **Hence, all four statements are correct.**

● **Time-Based One-Time Passwords (TOTP)** are generated by authenticator apps and change every 30 seconds, increasing security.

● **SMS-based 2FA is less secure**, as it is vulnerable to SIM-swapping and message interception.

● **Hardware tokens provide high security** and are resistant to phishing but may be costly and less convenient.

● **Push-based 2FA** (login approval prompts on phone) is convenient but can be vulnerable to “MFA fatigue” (accidental approvals).

● **2FA significantly reduces the success of phishing, credential theft, and brute-force attacks.**

● The **RBI mandates 2FA** for certain banking and digital payment services in India to enhance cyber security.

● **Limitations:**

- User inconvenience
- Vulnerability of some methods (e.g., SMS)
- Not all services support strong 2FA

● **Passkeys and passwordless authentication** (using biometrics + device identity) are emerging as future alternatives to 2FA.

PYQ REFERENCE: (2014)

Q. In addition to fingerprint scanning, which of the following can be used in the biometric identification of a person?

1. Iris scanning
2. Retinal scanning
3. Voice recognition

Select the correct answer using the code given below.

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

Source: <https://www.thehindu.com/sci-tech/science/how-does-two-factor-authentication-2fa-work/article70025620.ece>

34. AdFalciVax

34. With reference to ‘AdFalciVax’, recently seen in news, consider the following statements:

1. It is India’s first indigenous multi-stage malaria vaccine.
2. It has been developed using the bacterium Lactococcus lactis.
3. It acts only after the parasite enters the bloodstream.

Which of the statements given above is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: Centre grants licences to five firms to manufacture its first indigenous malaria vaccine

India’s First Indigenous Multi-Stage Malaria Vaccine: AdFalciVax

● A recombinant chimeric multi-stage malaria vaccine. **Hence statement 1 is correct.**

● Target: Plasmodium falciparum, the deadliest malaria parasite

● Platform: Produced using Lactococcus lactis (a safe bacteria used in biotechnology). **Hence statement 2 is correct.**

● Developed by:

○ Indian Council of Medical Research (ICMR) in collaboration with:

- ICMR-RMRC Bhubaneswar
- ICMR-National Institute of Malaria Research (NIMR)
- National Institute of Immunology (NII), New Delhi

● Purpose:

○ Prevent infection before the parasite enters the bloodstream.

Hence statement 3 is incorrect.

○ Reduce community-level transmission

● Key Features

○ Multi-stage action: Acts at both pre-blood and transmission stages

○ Stable: Remains effective for 9+ months at room temperature

○ Affordable, scalable, and ideal for low-resource settings

Malaria:

● Malaria is a life-threatening disease caused by Plasmodium parasites, transmitted to humans through the bite of infected female Anopheles mosquitoes.

● The most dangerous malaria parasite is Plasmodium falciparum, responsible for most severe cases and deaths globally.

● Other human malaria parasites include P. vivax, P. malariae, P. ovale, and P. knowlesi (a zoonotic strain).

● India contributes about 1.4% of global malaria cases and 0.9% of global malaria deaths.

● Approximately 95% of India’s population lives in malaria-endemic areas.

● 80% of India’s malaria burden comes from tribal, hilly, and difficult-to-reach regions, which house just 20% of the population.

● India is part of the WHO’s E-2025 initiative to eliminate malaria by 2030.

PYQ REFERENCE: (2021)

Q. With reference to recent developments regarding ‘Recombinant Vector Vaccines’, consider the following statements:

1. Genetic engineering is applied in the development of these vaccines.
2. Bacteria and viruses are used as vectors.

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

Source: <https://www.thehindu.com/sci-tech/health/india-brings-in-industry-partners-to-manufacture-and-commercialise-its-first-indigenous-multi-stage-malaria-vaccine/article70029864.ece>

35. Biostimulants

35. Which of the following biostimulants are classified under the permitted categories of biostimulants under Schedule VI of Fertilizer Control Order (FCO), 1985?

1. Botanical extracts
2. Biochemicals
3. Antioxidants
4. Anti-transpirants
5. Humic and fulvic acids and derivatives
6. Live micro-organisms including biofertilizers and biopesticides

Select the correct answer using the codes given below:

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

Answer: (c) 1, 2, 3, 4 and 5 only

Explanation:

In NEWS: Regulation of Biostimulant Products under Fertilizer Control Order (FCO), 1985

Biostimulants:

Biostimulants are natural or synthetic substances and microorganisms that enhance plant growth, yield, and resilience, not by providing nutrients directly, but by stimulating the plant's natural processes.

Key Benefits:

- Improved root and shoot development
- Enhanced nutrient uptake and use efficiency
- Greater resilience to drought, salinity, and temperature extremes
- Improved flowering, fruiting, and crop quality
- Reduced dependency on chemical fertilizers and pesticides

Regulation of Biostimulants in India under Fertilizer Control Order (FCO), 1985:

FCO Definition of Biostimulants

“Biostimulant” means a substance or micro-organism (or both) that stimulates plant physiological processes when applied to plants, seeds, or rhizosphere to enhance nutrient uptake, growth, yield, crop quality, and stress tolerance — regardless of nutrient content, and excluding pesticides or plant growth regulators covered under the Insecticides Act, 1968.

Permitted Categories under Schedule VI of FCO:

1. Botanical extracts (including seaweed extracts)

2. Biochemicals
3. Protein hydrolysates and amino acids
4. Vitamins
5. Cell-free microbial products
6. Antioxidants
7. Anti-transpirants
8. Humic and fulvic acids and derivatives
9. Live micro-organisms (excluding biofertilizers and biopesticides)

Hence option (c) is correct.

Current Status (as of Sept 2025):

- 146 biostimulant products have been officially included in Schedule VI of FCO.
- These are notified in the Gazette of India and listed on the DoA website.

PYQ REFERENCE: (2012)

Q. Consider the following kinds of organisms:

1. Bacteria
2. Fungi
3. Flowering plants

Some species of which of the above kinds of organisms are employed as bio pesticides?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2165081>

36. EXERCISE ZAPAD 2025

36. Consider the following statements with respect to Exercise ZAPAD 2025:

- I. The Exercise provides a platform for participating armies to exchange tactics, techniques and procedures in the domains of conventional warfare and counter-terrorism operations.
- II. The exercise is usually held once every four years.
- III. India is one of the participants of the exercise.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (d) I, II and III

Explanation:

In NEWS: INDIAN ARMED FORCES CONTINGENT DEPARTS FOR MULTILATERAL EXERCISE ZAPAD 2025 IN RUSSIA

Exercise Zapad:

● Zapad exercise ('Exercise West') is a series of Soviet then Russian Federation military exercises usually held once every four years. **Hence statement II is correct.**

● Several of the exercises were joint Russian-Belarusian exercises held on Belarusian territory.

Exercise Zapad 2025:

● The multilateral Exercise ZAPAD 2025 is aimed at enhancing military cooperation, improving interoperability, and providing a platform for participating armies to exchange tactics, techniques and procedures in the domains of conventional warfare and counter-terrorism operations. **Hence statement I is correct.**

● The 2025 edition of the exercise will see the participation of over twenty countries including Belarus, Bangladesh, Burkina Faso, Congo, Mali, India, Iran, Niger and Tajikistan. **Hence statement III is correct.**

● Cambodia, China, Cuba, Kazakhstan, Mongolia, Myanmar, Nicaragua, North Korea, Pakistan, Serbia, Thailand, the UAE and Uzbekistan will take part as observers.

● The exercise will focus on joint company level operations in open and plain terrain, wherein troops will undertake missions ranging from joint planning, tactical drills, and special arms skills.

● It will offer a valuable opportunity to hone joint operational capabilities, integrate emerging technologies, and operate in a multinational combat environment.

● Participation in Exercise ZAPAD 2025 will further strengthen defence cooperation and foster camaraderie between India and Russia, thereby reinforcing the spirit of collaboration and mutual trust.

PYQ REFERENCE: (2024)

Q. Which of the following statements about 'Exercise Mitra Shakti-2023' are correct?

1. This was a joint military exercise between India and Bangladesh
2. It commenced in Aundh (Pune).
3. Joint response during counter-terrorism operations was a goal of this operation.
4. Indian Air Force was a part of this exercise.

Select the answer using the code given below:

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2164916>

37. BioE3

37. Which of the following thematic areas are covered under the BioE3 policy?

1. Bio-based chemicals and biopolymers
2. Smart proteins and functional foods
3. Precision biotherapeutics
4. Carbon capture and utilisation

Select the correct answer using the code given below:

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

Answer: (d) 1, 2, 3 and 4

Explanation:

In NEWS: Under the BioE3 policy, the government plans to set up 16 biomanufacturing hubs across India to cut import dependence and boost manufacturing within the country.

BioE3 (Biotechnology for Economy, Environment and Employment):

● BioE3 is a policy approved by the Union Cabinet in **August 2024**. It stands for **Biotechnology for Economy, Environment and Employment**.

● The policy aims to **foster high-performance biomanufacturing** in India.

● It focuses on **economic growth, environmental sustainability, and employment generation**.

● The policy promotes **innovation, R&D and entrepreneurship** in biotechnology.

● It supports the concept of a **circular bioeconomy and climate change mitigation**.

● BioE3 will establish **Biomanufacturing Hubs and Biofoundries** to scale up technologies.

● It will create **Bio-AI Hubs** to integrate biotechnology with artificial intelligence.

● Thematic areas include **bio-based chemicals, smart proteins, biopolymers, precision biotherapeutics, climate-resilient agriculture, carbon capture, marine and space research**. **Hence all the statements are correct.**

● It encourages **public-private partnerships** in biomanufacturing.

● The policy emphasises **regulatory reforms and inter-ministerial coordination**.

● It aims to build a **skilled workforce** in the biomanufacturing sector.

● BioE3 is expected to boost **green growth** and support India's **net-zero targets**.

● It will help in **commercialising biotech innovations** from lab to industry.

● The policy will generate **new employment opportunities** across the biotechnology value chain.

PYQ REFERENCE: (2016)

Q. With reference to an initiative called "The Economics of Ecosystems and Biodiversity (TEEB)" which of the following statements is/are correct?

1. It is an initiative hosted by UNEP, IMF and World Economic Forum.
2. It is a global initiative that focuses on drawing attention to the economic benefits of biodiversity.
3. It presents an approach that can help decision-makers recognize, demonstrate and capture the value of ecosystems and biodiversity.

Select the correct answer using the code given below.

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

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-bioe3-policy-biotechnology-vigyan-dhara-upsc-10237007/>
<https://dbtindia.gov.in/news-features/cabinet-approves-bioe3-biotechnology-economy-environment-and-employment-policy>

38. Melioidosis

38. Consider the following statements:

I. Melioidosis is a severe bacterial disease caused by the bacterium found in soil and water, especially in tropical and subtropical regions.

II. Melioidosis predominantly spreads through person-to-person transmission.

Which of the statements given above is/are correct?

- (a) I only
(b) II only
(c) Both I and I
(d) Neither I nor II

Answer: (a) I only

Explanation:

In NEWS: An air of mystery surrounds the deaths in Turakapalem village near Andhra's Guntur city

Melioidosis:

● Melioidosis is a severe, sometimes fatal, infectious disease caused by the bacterium *Burkholderia pseudomallei*. **Hence statement I is correct.**

● It is contracted through contact with contaminated soil and water, particularly during the rainy season, and can manifest as lung infections, skin lesions, or widespread septicemia.

● The bacterium is found in soil and water, especially in tropical and subtropical regions.

● Handling soil, working in agriculture or construction, and activities involving contact with fresh water, especially during or after flooding increases the risk of exposure to the bacterium.

● While many infections are asymptomatic, people with chronic conditions like diabetes, kidney disease, or those who are immunosuppressed are at higher risk of severe illness.

How it spreads:

● Through direct contact with contaminated soil or water.

● Inhalation of contaminated dust or water droplets.

● Ingestion of contaminated water.

● Contamination of open wounds or cuts.

● Person-to-person spread is very rare. There are only a few documented cases of person-to-person transmission. **Hence statement II is incorrect.**

Treatment and Outcome:

● Treatment requires long courses of antibiotics, which can last for several months.

- Aggressive and timely antibiotic therapy is critical for survival.
- Some infections, especially if left untreated, can lead to severe complications or death.

Prevention:

● Wear protective footwear when in soil or water, especially in endemic areas.

● Use protective barriers to cover open wounds and abrasions.

● Exercise caution when handling soil or water during heavy rain or after floods.

PYQ REFERENCE: (2017)

Q. Consider the following statements:

1. In tropical regions, Zika virus disease is transmitted by 'the same mosquito that transmits dengue.
2. Sexual transmission of Zika virus disease is possible

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

Source: https://www.downtoearth.org.in/health/an-air-of-mystery-surrounds-the-deaths-in-turakapalem-village-near-andhras-guntur-city#google_vignette

39. SAMBHAV

39. With reference to SAMBHAV, consider the following statements:

1. It is India's first secure mobile communication platform designed specifically for defence use.
2. It operates independently of commercial networks and supports real-time connectivity through 5G-enabled devices.
3. The system uses multi-layer encryption to prevent hostile surveillance or cyber-attacks.

Which of the statements given above is/are correct?

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: The Indian Army deployed its indigenous secure mobile ecosystem, SAMBHAV, during Operation Sindoor, according to Chief of Army Staff Gen Upendra Dwivedi.

SAMBHAV:

● Launched in 2023 as India's first secure mobile communication platform for defence use. **Hence statement 1 is correct.**

● Purpose: To provide a trusted, indigenous, and cyber-resilient communication system for armed forces.

Key Features:

- Operates **independently of commercial networks**, ensuring security.
- **5G-enabled devices** support real-time connectivity. **Hence statement 2 is correct.**
- **Multi-layer encryption** protects against hostile surveillance, cyber espionage, or cyber-attacks. **Hence statement 3 is correct.**
- Core application **M-Sigma** allows encrypted messaging, file sharing, and multimedia exchange.
- **Network-agnostic** – works securely across multiple communication infrastructures without compromising data integrity.

Significance:

- Reduces dependence on foreign platforms like WhatsApp/Signal/Telegram.
- Strengthens **national security, strategic autonomy, and information warfare resilience.**
- Critical for modern network-centric warfare and joint-force operations.

PYQ REFERENCE: (2022)

Q. Consider the following:

1. Aarogya Setu
2. CoWIN
3. DigiLocker
4. DIKSHA

Which of the above are built on top of open-source digital platforms?

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

Source:

<https://economictimes.indiatimes.com/news/defence/inside-operation-sindoor-when-the-indian-army-ditched-whatsapp-peers-to-communicate-for-something-made-in-india-sambhav-mobile/articleshow/123779172.cms?from=mdr>

40. Polypropylene

40. Consider the following:

1. Face masks
2. Cement bags
3. Drip irrigation pipes
4. Insulation materials
5. Food packaging

How many of the above materials contain Polypropylene?

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

Answer: (d) All the five

Explanation:

In NEWS: Prime Minister Shri Narendra Modi inaugurates Bioethanol Plant and lays foundation for Polypropylene Unit in Numaligarh Refinery Limited (NRL) in Assam.

Polypropylene:

- Polypropylene is a versatile thermoplastic polymer made from the monomer propylene. It's part of the polyolefin family and is known for:
 - High chemical resistance
 - Low density (lightweight)
 - Strength & durability
 - Easy moldability
- It's one of the most widely used plastics in the world, including India.
- PP is recyclable (code #5 plastic), though actual recycling rates are low.
- It's food-safe, lightweight, and moisture-resistant.
- It is durable, heat-resistant, and cheap to produce

Key Applications of Polypropylene in India:

Packaging Industry

- Food packaging: Chips, snacks, tea, sugar, grains
- Woven sacks: Cement bags, fertilizer bags, rice bags
- Flexible packaging: Films, pouches
- Containers & bottles

Household Goods

- Buckets, mugs, chairs, tables
- Storage boxes, crates, trays
- Dustbins, cloth drying stands

Automotive Industry

- Car bumpers, dashboards
- Battery casings, door panels
- Interior parts

Textile & Apparel

- Non-woven fabrics (especially for disposable items)
- Face masks
- Medical gowns
- Sanitary napkins
- Ropes, carpets, and mats

Healthcare & Medical

- Syringes, IV bottles, pill containers
- Disposable masks, gowns, and medical kits

Agriculture

- Drip irrigation pipes
- Mulch films
- Ropes, twines
- Fertilizer packaging

Construction & Infrastructure

- Pipes & fittings (especially PP-R)
- Storage tanks
- Insulation materials

Hence option (d) is correct.

PYQ REFERENCE: (2022)

Q. With reference to polyethylene terephthalate, the use of which is so widespread in our daily lives, consider the following statements:

1. Its fibres can be blended with wool and cotton fibres to reinforce their properties.
2. Containers made of it can be used to store any alcoholic beverage.
3. Bottles made of it can be recycled into other products.
4. Articles made of it can be easily disposed of by incineration without causing greenhouse gas emissions.

Which of the statements given above are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2166529>

41. INS Nistar

41. Consider the following statements with respect to INS Nistar:

- I. INS Nistar is the first indigenously designed and built Diving Support Vessel in India.
- II. The vessel has the capacity for submarine rescue operations up to 650 meters depth.
- III. Recently, the Vessel participated in Pacific Reach 2025, a biennial multinational submarine rescue exercise hosted by Singapore.

Which of the statements above is/are correct?

- (a) I only
(b) II and III only
(c) I and III only
(d) I, II and III

Answer: (d) I, II and III

Explanation:

In NEWS: INS Nistar makes maiden port call at Singapore

INS Nistar:

● INS Nistar, India's new Diving Support Vessel (DSV), along with Submarine Rescue Unit (East), made its maiden port call at Changi Naval Base, Singapore on 14 September 2025 to participate in Exercise Pacific Reach 2025. **Hence statements I and III are correct.**

● INS Nistar was commissioned on 18 July 2025 and is the first indigenously designed and built DSV in India, with more than 80% indigenous content.

● The vessel will function as the MoShip ("Mother Ship") for Deep Submergence Rescue Vehicles (DSRVs), enabling rescue operations in distress situations for submarines.

● INS Nistar is under the command of the Eastern Fleet of the Indian Navy.

Technical / Operational Capabilities

- Equipped with Side Scan Sonar, ROVs (work & observation class), and deep-sea diving systems.
- Has the capacity for submarine rescue operations up to 650 meters depth (via the DSRVs). **Hence statement II is correct.**
- Endurance over 60 days, capability for helicopter operations, and facilities such as decompression chambers etc.

Exercise Pacific Reach 2025:

- Pacific Reach 2025 is a biennial multinational submarine rescue exercise hosted by Singapore, involving more than 40 nations as active participants or observers.
- The exercise has two phases:
 - Harbour phase: includes Subject Matter Expert Exchanges (SMEE), medical symposium, cross-deck visits, discussions on submarine rescue systems.
 - Sea phase: sees INS Nistar and Submarine Rescue Unit East engaging in intervention and rescue operations in the South China Sea.

PYQ REFERENCE: (2016)

Q. Which one of the following is the best description of 'INS Astradharini', that was in the news recently?

- (a) Amphibious warfare ship
(b) Nuclear-powered submarine
(c) **Torpedo launch and recovery vessel**
(d) Nuclear-powered aircraft carrier

Source: <https://www.thehindu.com/news/national/ins-nistar-makes-maiden-port-call-at-singapore-for-multinational-submarine-rescue-exercise/article70053202.ece>

42. Arjuna asteroid 2025 PN7

42. '2025 PN7', recently seen in the news is an?

- (a) Comet
(b) Refrigerants
(c) Asteroid
(d) Fertilizer

Answer: (c) Asteroid

Explanation:

In NEWS: Arjuna asteroid 2025 PN7 is earth's latest quasi-satellite

Arjuna asteroid 2025 PN7:

● Asteroid **2025 PN7** is a newly identified **quasi-satellite** of Earth — it shares a 1:1 orbital resonance with Earth but is not gravitationally bound.

● It belongs to the **Arjuna class of near-Earth objects (NEOs)**, characterized by orbits similar to Earth's: low eccentricity, low inclination, and orbital period close to one Earth year.

● The asteroid is estimated to be about **19–30 metres** in diameter.

- It was first observed by **Pan-STARRS in Hawaii on 2 August 2025**, though archival data suggests it has been following its Earth-like orbit for decades.
- Orbital parameters:
 - Semi-major axis ≈ 1.0030 AU
 - Eccentricity ≈ 0.1075
 - Inclination: low, close to Earth's orbital plane.
- **2025 PN7 will remain a quasi-satellite for about 128 years**, after which gravitational perturbations will alter its orbit, possibly shifting it into a horseshoe or Trojan-type orbit.
- During closest approaches, it can come within about **300,000 km ($\approx 186,000$ miles)** of Earth, but it poses **no impact threat**.
- It is considered among the **smallest and least stable** quasi-satellites of Earth.
- The discovery improves understanding of Earth's near-space environment and small NEOs, which are significant for **planetary defense, scientific study, and potential space resource utilization**.

PYQ REFERENCE:

Q. What is the common characteristic of the chemical substances generally known as CL-20, HMX and LLM-105, which are sometimes talked about in media?

- (a) These are alternatives to hydrofluorocarbon refrigerants
- (b) These are explosives in military weapons**
- (c) These are high-energy fuels for cruise missiles
- (d) These are fuels for rocket propulsion

Source: <https://www.thehindu.com/sci-tech/science/arjuna-asteroid-2025-pn7-is-earths-latest-quasi-satellite/article70064214.ece>

43. Maternal Mortality

43. Consider the following statements:

1. Maternal Mortality Ratio (MMR) is the number of maternal deaths per 1000 live births in a given period.
2. Puducherry is the first Union Territory to achieve zero maternal mortality in India.

Which of the statements given above is/are correct?

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

Answer: (b) 2 only

Explanation:

In NEWS: Puducherry becomes first UT to achieve zero maternal mortality

Maternal Mortality:

- **Maternal Mortality** refers to the death of a woman during pregnancy, childbirth, or within **42 days of termination of pregnancy**, irrespective of the duration or site of the pregnancy, from causes related to or aggravated by the pregnancy or its management.

- **Maternal Mortality Ratio (MMR):** Number of maternal deaths per **100,000 live births** in a given period. **Hence statement 1 is incorrect.**
- According to **UN Sustainable Development Goal (SDG) 3.1**, countries must reduce the **global MMR to less than 70 per 100,000 live births by 2030**.
- Causes globally: severe bleeding, infections, unsafe abortions, hypertensive disorders (eclampsia), and obstructed labour.

Maternal Mortality in India

- As per **Sample Registration System (SRS) Special Bulletin (2018–20)**, India's MMR is **97 per 100,000 live births**, showing consistent decline.
- India achieved the **National Health Policy target of MMR <100 by 2020**.
- **Puducherry** is the first Union Territory to achieve **zero maternal mortality** in India. **Hence statement 2 is correct.**
- States with **lowest MMR:** Kerala (19), Maharashtra (33), Telangana (43).
- States with **highest MMR:** Assam (195), Madhya Pradesh (173), Uttar Pradesh (167).

Government Initiatives

1. **Janani Suraksha Yojana (JSY):** Cash incentive scheme under the National Health Mission to promote institutional deliveries.
2. **Janani Shishu Suraksha Karyakram (JSSK):** Free institutional delivery, free drugs, diagnostics, diet, and transport for pregnant women.
3. **LaQshya Programme:** Launched in 2017, aims at improving quality of care in labour rooms and maternity operation theatres.
4. **POSHAN Abhiyaan:** Addresses maternal and child malnutrition.
5. **Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA):** Free antenatal check-ups on the 9th of every month for pregnant women.
6. **Midwifery Services Initiative (2018):** Strengthening skilled birth attendants.

PYQ REFERENCE: (2024)

Q. The total fertility rate in an economy is defined as:

- (a) the number of children born per 1000 People in the Population in a year.
- (b) the number of children born to couple in their lifetime in a given population.
- (c) the birth rate minus death rate.
- (d) the average number of live births a woman would have by the end of her child-bearing age.

Source: <https://www.newindianexpress.com/states/tamil-nadu/2025/Sep/18/puducherry-becomes-first-ut-to-achieve-zero-maternal-mortality#:~:text=Chief%20Minister%20Rangasamy%2C%20in,major%20milestone%20in%20women's%20healthcare.>

44. India's fusion power - ITER project

44. Which among the following statements are correct with respect to the "International Thermonuclear Experimental Reactor"?

1. It is the world's largest experimental fusion reactor.
2. It uses thorium in place of uranium for power generation.
3. The nuclear fusion reaction is a carbon-free energy source.
4. India is one of the full members of the ITER project

Select the correct answer using the codes given below:

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

Answer: (b) 1, 3 and 4 only

Explanation:

In NEWS: IPR Gandhinagar proposes roadmap for India's fusion power plans

ITER (International Thermonuclear Experimental Reactor)

● World's largest experimental **tokamak** (fusion reactor) under construction at **Cadarache, France**. **Hence statement 1 is correct.**

● Objective: To demonstrate the feasibility of **nuclear fusion as a large-scale, carbon-free energy source**. **Hence statement 3 is correct.**

● Seeks to produce **10 times more energy output than input** (500 MW output from 50 MW input).

● ITER uses deuterium + tritium fusion. **Hence statement 2 is incorrect.**

India's Participation

● India is one of the **7 full members**: EU, USA, Russia, Japan, China, South Korea, and India. **Hence statement 4 is correct.**

● India contributes about **9% of ITER's construction cost** (in-kind and in-cash).

● The **Institute for Plasma Research (IPR), Gandhinagar** is India's nodal agency.

India's Key Contributions

● Fabrication of **cryostat** (the world's largest stainless-steel vacuum chamber).

● Development of in-vessel shielding, cooling water systems, cryogenic systems.

● Supply of **diagnostic equipment** and advanced materials.

Strategic Importance for India

● Access to **frontline fusion technology** and global research collaborations.

● Builds capacity in **superconducting magnets, cryogenics, materials science, and plasma research**.

● Supports India's long-term plan for indigenous devices like **SST-1, ADITYA-U**, and proposed **SST-Bharat**.

Challenges

● Fusion requires extreme conditions: plasma temp ~150 million °C, superconducting magnets, tritium breeding.

● High cost, long gestation period, and complex international collaboration.

Future Outlook

● ITER is expected to begin operations around **2035**.

● India's parallel roadmap envisions building **fusion-fission hybrid reactors** and a **DEMO reactor (~250 MWe)** for eventual commercialization.

PYQ REFERENCE: (2016)

Q. India is an important member of the 'International Thermonuclear Experimental Reactor'. If this experiment succeeds, what is the immediate advantage of India?

- (a) It can use thorium in place of uranium for power generation.
- (b) It can attain a global role in satellite navigation
- (c) It can drastically improve the efficiency of its fission reactors in power generation
- (d) It can build fusion reactors for power generation**

Source: <https://www.thehindu.com/sci-tech/science/ipr-gandhinagar-team-proposes-roadmap-for-indias-fusion-power-plans/article70083807.ece#:~:text=Researchers%20at%20the%20Institute%20for%20power%20output%205x%20the%20input.>

45. Chief of Defence Staff (CDS)

45. With reference to the Chief of Defence Staff (CDS), which among the following statements is/are correct?

1. It is a constitutional post that derives its authority from executive powers of the Union under Article 53 & 78 as part of defence administration.
2. CDS is an ex-officio member of the Cabinet Committee on Security (CCS).
3. He/She serves for 5 years or until attaining the age of 60 years, whichever is earlier.
4. He/She acts as the principal military advisor to the Union Cabinet and Defence Minister, aligning with the principle of civilian supremacy over armed forces.

Select the correct answer using the code given below:

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

Answer: (d) 2 and 4 only

Explanation:

In NEWS: Government Extends the Service of General Anil Chauhan as Chief of Defence Staff (CDS) & Secretary, Department of Military Affairs

Chief of Defence Staff (CDS):

Creation and Legal Basis:

● The post of CDS was **created in December 2019** by the Government of India to strengthen **tri-service integration**.

● CDS functions under the **Department of Military Affairs (DMA)** in the Ministry of Defence.

Constitutional/Polity Angle:

● The position is **not directly mentioned in the Constitution**, but it derives authority from **executive powers of the Union under Article 53 & 78**, as part of defence administration. **Hence statement 1 is incorrect.**

● Acts as the **principal military advisor to the Union Cabinet and Defence Minister**, aligning with the principle of **civilian supremacy over armed forces** (Articles 53, 74, and 77). **Hence statement 4 is correct.**

Rank and Status:

● CDS holds the rank of **four-star General / Admiral / Air Chief Marshal**.

● Is an **ex-officio member of the Cabinet Committee on Security (CCS)**. **Hence statement 2 is correct.**

Tenure: Serves for **3 years or until attaining the age of 65 years**, whichever is earlier. **Hence statement 3 is incorrect.**

Functions and Responsibilities:

● Integrates **defence planning, operations, logistics, and procurement** across Army, Navy, and Air Force.

● Promotes **jointness in training, operations, and strategy** among the three services.

● Heads the **Department of Military Affairs (DMA)** to streamline **tri-service matters**.

● Advises on **national security strategy** and modernization of armed forces.

Significance for Governance:

● Enhances **efficiency, accountability, and coordination** in defence management.

● Reduces **inter-service rivalry** and duplication of resources.

● Strengthens **civil-military interface** in line with **democratic control of armed forces**.

PYQ REFERENCE: (2024)

Q. What are the duties of the Chief of Defence Staff (CDS) as Head of the Department of Military Affairs?

1. Permanent Chairman of Chiefs of Staff Committee
2. Exercise military command over the three Service Chiefs
3. Principal Military Advisor to Defence Minister on all tri-service matters

Select the correct options using the code given below:

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2170934>

46. World Food India 2025

46. Consider the following statements:

I. World Food India 2025 is organised by the Ministry of Food Processing Industries (MoFPI), Government of India.

II. “Where Flavors Meet Global Strategic Partnerships” is the theme of World Food India 2025.

III. In India, 100% FDI is permitted in the food processing sector under the automatic route.

Which of the statements given above are correct?

- (a) I and II only
(b) II and III only
(c) I and III only
(d) I, II and III

Answer: (d) I, II and III

Explanation:

In NEWS: World Food India 2025, being organised by the Ministry of Food Processing Industries on September 25-28, 2025

World Food India (WFI) 2025:

● WFI 2025 is a strategic global platform for investment, innovation, and partnerships in the food sector.

● It aligns with Viksit Bharat 2047, aiming to make India a global leader in food processing—balancing scale, sustainability, and inclusive growth.

● Theme: “Where Flavors Meet Global Strategic Partnerships”.

Hence statement II is correct.

● Venue: Bharat Mandapam, New Delhi

● Organised by: Ministry of Food Processing Industries (MoFPI), Government of India. **Hence statement I is correct.**

Objective:

To position India as a Global Food Hub by showcasing its food processing potential, innovation, and investment opportunities, while forging global partnerships across the food value chain.

Key Features:

● Sectoral exhibitions in food processing, packaging, cold chains, pet food, HoReCa, post-harvest tech

● B2B, B2G, G2G meetings for business, investment, and strategic partnerships

● Conference & Knowledge Sessions with global experts

● Culinary experiences, live chef competitions, and fusion food displays

● Startup Grand Challenge for innovation, mentorship & funding

Food Processing Sector in India:

● The food processing sector contributes significantly to India’s GDP, employment, and exports, and is considered a sunrise sector of the Indian economy.

● India is the world’s largest producer of milk, onions, and pulses, and the second-largest producer of rice, wheat, sugarcane, fruits & vegetables, tea, and eggs.

- Foreign Direct Investment (FDI) equity inflow of USD 7.33 billion was received in the food processing sector over the last decade.
- In 2024–25, agriculture and processed food exports touched USD 49.4 billion, with processed foods contributing 20.4% of this share (up from 13.7% in 2014–15).
- The sector provides employment to over 6.9 million people — 2.23 million in registered units and 4.68 million in the unregistered sector.
- 64 lakh food business operators are now registered, up from 25 lakh, reflecting growing formalisation in the sector.
- Infrastructure support includes:
 - 24 Mega Food Parks
 - 22 Agro-processing Clusters
 - 289 Cold Chain Projects
 - 305 Processing and Preservation Units
- Government has implemented key schemes like:
 - Pradhan Mantri Kisan Sampada Yojana (PMKSY)
 - PM Formalisation of Micro Food Processing Enterprises (PMFME)
 - Production Linked Incentive Scheme (PLISFPI) – ₹10,900 crore
 - PLIS for Millet-Based Products (PLISMBP)
- 100% FDI is permitted in the food processing sector under the automatic route. **Hence statement III is correct.**
- The sector focuses on value addition, reduction of post-harvest losses, enhancing farmer incomes, and creating jobs in rural and semi-urban areas.
- India is promoting millets, plant-based proteins, Ready-to-Eat (RTE), and Ready-to-Cook (RTC) food products as part of future-ready food categories.
- Through initiatives like Make in India, the government aims to position India as a global food processing hub.

PYQ REFERENCE: (2011)

Q. With what purpose is the Government of India promoting the concept of “Mega Food Parks”?

1. To provide good infrastructure facilities for the food processing industry.
2. To increase the processing of perishable items and reduce wastage.
3. To provide emerging and eco-friendly food processing technologies to entrepreneurs.

Select the correct answer using the codes given below:

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2170508>

47. AstroSat

47. With reference to AstroSat, consider the following statements:

1. It is the only satellite to study both visible and radio bands simultaneously.
2. It is the only space observatory capable of performing simultaneous multi-wavelength observations from ultraviolet to hard X-rays.
3. It is the first space observatory placed in a geostationary orbit.
4. It was the first Indian satellite dedicated solely to earth observation in multiple bands.

Which of the statements given above is/are correct?

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

Answer: (b) 2 only

Explanation:

In NEWS: A decade among the stars: India’s first space observatory AstroSat completes 10 years

AstroSat:

- **AstroSat** is India’s first dedicated multi-wavelength space observatory. **Hence statement 2 is correct.**
- Launched by ISRO on 28 September 2015 using PSLV-C30 from Sriharikota.
- It observes the universe in X-ray, ultraviolet, and optical spectral bands simultaneously (not radio waves). **Hence statement 1 is incorrect.**
- AstroSat is in a low Earth orbit (~650 km), not geostationary. **Hence statement 3 is incorrect.**
- AstroSat is an astronomy/astrophysics satellite, not dedicated to Earth observation. **Hence statement 4 is incorrect.**

Key Features

- **Orbit:** Near Equatorial Orbit, ~650 km altitude.
- **Payloads / Instruments:**
 - **Ultra Violet Imaging Telescope (UVIT)** – studies star formation and galaxy evolution.
 - **Large Area X-ray Proportional Counter (LAXPC)** – timing and spectral studies of X-ray sources.
 - **Soft X-ray Telescope (SXT)** – studies supermassive black holes and neutron stars.
 - **Cadmium Zinc Telluride Imager (CZTI)** – studies high-energy X-rays and gamma-ray bursts.
 - **Scanning Sky Monitor (SSM)** – detects transient X-ray sources.

Objectives

- Study high-energy phenomena like black holes, neutron stars, pulsars.
- Investigate star birth, stellar evolution, and supernovae.
- Monitor active galactic nuclei (AGN) and binary star systems.

- Provide **simultaneous multi-wavelength observations**, a unique capability among global observatories.

Achievements

- Detected **ultraviolet light from a galaxy 9.3 billion light years away**.
- Studied **X-ray emission from Crab pulsar and polarization of gamma-ray bursts**.
- Helped in understanding **binary star systems and quasars**.
- Contributed data to global astronomy missions through collaborations.

PYQ REFERENCE: (2016)

Q. With reference to 'Astrosat', the astronomical observatory launched by India, which of the following statement(s) is/are correct?

1. Other than USA and Russia, India is the only country to have launched a similar observatory into space.
2. Astrosat is a 2000 kg satellite placed in an orbit at 1650 km above the surface of the Earth.

Select the correct answer using the codes given below.

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

Source: <https://www.thehindu.com/sci-tech/science/a-decade-among-the-stars-indias-first-space-observatory-astrosat-completes-10-years/article70104675.ece>

48. Agni-Prime missile

48. With reference to Agni-Prime Missile, Consider the following statements:

1. It is an intermediate-range ballistic missile developed by India's Defence Research and Development Organisation (DRDO).
2. It has a strike range of up to 2,000 kilometers.
3. The missile is capable of launching from a Rail-based mobile launcher system.

How many of the above statements is/are correct?

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

Answer: (c) All the three

Explanation:

In NEWS: DRDO conducts rail-based launch of Agni-Prime missile

Agni-Prime Missile Successfully Test-Fired from Rail-Based Mobile Launcher :

- Test Conducted By: DRDO and Strategic Forces Command (SFC)
- Missile Range: Up to 2,000 km (Intermediate Range)

- Launch Platform: Rail-based mobile launcher system — first-ever launch from this platform. **Hence statement 3 is correct.**

Key Features:

- Rapid, low-visibility deployment
- Cross-country mobility
- Test Result: Successful, met all mission objectives

Significance:

- Paves way for induction of rail-mobile launch systems
- India joins select group of nations with rail-based canisterized missile launch capability
- Road-mobile Agni-Prime version already inducted after trials

Agni-Prime Missile:

● Agni-Prime is an intermediate-range ballistic missile developed by India's Defence Research and Development Organisation (DRDO). **Hence statement 1 is correct.**

● It has a strike range of up to 2,000 kilometers. **Hence statement 2 is correct.**

● The missile features advanced technology, including improved accuracy and enhanced mobility.

● It is designed to be launched from multiple platforms, including road-mobile and rail-mobile launchers.

Key Features and Capabilities

● Canisterized Launch: Designed for quick deployment and enhanced mobility.

● Enhanced Propulsion: Incorporates advanced composite materials for improved performance.

● Advanced Guidance: Features state-of-the-art navigation and control systems for precision targeting.

● Strategic Deterrence: Strengthens India's credible deterrence capabilities with a flexible and survivable missile system.

PYQ REFERENCE: (2014)

Q. With reference to Agni-IV Missile, which of the following statement(s) is/are correct?

1. It is surface-to-surface missile.
2. It is fuelled by liquid propellant only.
3. It can deliver one tonne nuclear warhead about 7500 km away.

Select the correct answer using the codes given below.

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

Source:

<https://www.thehindu.com/news/national/intermediate-range-agni-prime-missile-successfully-tested-from-rail-based-mobile-launcher-system/article70091825.ece>

ENVIRONMENT AND AGRICULTURE

49. The Scheduled Tribes and Other Traditional Forest-Dwellers (Recognition of Rights) Act

49. Consider the following statements regarding the Forest Rights Act (FRA), 2006:

1. It recognises both individual and community rights over forest land.
2. Other Traditional Forest Dwellers (OTFDs) must prove residence in forest areas for at least 75 years before 2005.
3. The Gram Sabha is the final authority to approve forest rights claims.

Which of the above statements is/are correct?

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

Answer: (a) 1 and 2 only

In NEWS: Build consensus on 'sunset clause' for forest rights titles: UNDP report

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006:

- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, is a key piece of forest legislation passed in India on 18 December 2006.
- It has also been called the **Forest Rights Act, the Tribal Rights Act, the Tribal Bill, and the Tribal Land Act.**
- The law concerns the rights of forest-dwelling communities to land and other resources, denied to them over decades as a result of the continuance of colonial forest laws in India.

Objectives

- To recognize and vest forest rights of STs and OTFDs.
- To provide tenurial security and livelihood rights.
- To empower communities in forest conservation and management.
- To ensure food security and social justice.

Eligibility

- Scheduled Tribes (STs): Must reside in and depend on forest land.
- Other Traditional Forest Dwellers (OTFDs): Must prove residence for at least 75 years before 13 December 2005.

Rights Granted

- Individual Forest Rights (IFR) – For cultivation and habitation (up to 4 hectares).
- Community Rights (CR) – For grazing, fishing, and collecting minor forest produce (MFP).
- Community Forest Resource (CFR) Rights – To manage and conserve forests.
- Habitat Rights – For PVTGs and pre-agricultural communities.
- Development Rights – Use of forest land for schools, hospitals, and infrastructure (up to 1 hectare without felling trees).

Institutional Mechanism

- Gram Sabha – Primary authority for initiating claims.

- Sub-Divisional Level Committee (SDLC) – Examines claims.
- **District Level Committee (DLC)** – Final approval authority.
- State Level Monitoring Committee – Supervises implementation.

Significance

- Empowers tribals and local communities as custodians of forests.
- Promotes participatory governance.
- Reduces conflict between tribals and forest departments.
- Secures livelihoods and cultural rights of vulnerable groups.

PYQ REFERENCE:

Q. Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, who shall be the authority to initiate the process for determining the nature and extent of individual or community forest rights or both?

- (a) State Forest Department
- (b) District Collector/Deputy Commissioner
- (c) Tahsildar/Block Development officer/Mandal Revenue Officer
- (d) Gram Sabha**

Source:

<https://www.thehindu.com/sci-tech/energy-and-environment/build-consensus-on-sunset-clause-for-forest-rights-titles-undp-report/article69989500.ece>

50. Senna spectabilis

50. Consider the following statements with respect to Senna spectabilis:

1. It is native to India
2. It is less water intensive and fosters ecological conservation
3. It demonstrates medicinal properties including traditional treatments for insomnia and anxiety.

How many of the above statements are correct?

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

Answer: (a) Only one

In NEWS: Red alert over green menace: How South India is fighting back against the Senna invasion

Senna spectabilis:

- Senna spectabilis is a legume (family Fabaceae, subfamily Caesalpinioideae), native to South and Central America, including eastern tropical Brazil and coastal Ecuador, and also found throughout Central America and the West Indies.
- It thrives across various habitats, including rainforests, semi-deciduous and dry forests, and montane zones up to 2,000 m altitude
- Prefers full sun and well-drained soils, and tolerates a wide soil range (moist, clay, loam, even slightly alkaline or acidic soils)
- Ornamental plant with showy blooms, commonly planted in yards and public spaces

- Also used in agroforestry for shade, fodder, mulch, firewood, and honey production.
- Its wood is versatile: heavy, soft, termite-resistant, suitable for tool handles, furniture, boxes, construction, and charcoal
- Demonstrates medicinal properties: antifungal activity (e.g., against *Candida albicans*); traditional treatments for ringworm, skin diseases, epilepsy, constipation, insomnia, and anxiety.

Invasiveness:

- Introduced to regions in Africa and South India, where it has become invasive, used initially for firewood and ecological restoration (e.g., combating desertification).
- Displaces native vegetation by forming dense, monoculture thickets that outcompete indigenous plant species.
- Alters soil chemistry, making it less suitable for native plants and disrupting ecological balance.
- Reduces biodiversity by eliminating undergrowth like grasses and shrubs, crucial for herbivores.
- Increases human-wildlife conflict as large mammals (e.g., elephants, tigers) enter human settlements in search of food.
- Regrows aggressively – even after cutting or bark removal, it resprouts quickly unless uprooted completely.
- Produces thousands of seeds per tree, which stay viable for up to 10 years, aiding rapid and uncontrolled spread.
- Accelerates forest fragmentation by invading wildlife corridors like the Nilgiri Biosphere Reserve.
- Consumes water and nutrients rapidly, stressing local ecosystems already vulnerable to climate change.

Elimination:

- In Tamil Nadu, for instance, it is being used in a pilot to produce paper pulp—but removal of roots is vital, as harvesting alone is not enough to control its invasiveness.
- Tholpetty, Wayanad - India's first science-backed, community-led Senna eradication.

List of invasive plant species in India:

- *enna spectabilis*
- *Lantana camara*
- *Eupatorium (Chromolaena odorata)*
- *Parthenium hysterophorus*
- *Prosopis juliflora*
- *Acacia mearnsii*
- *Mikania micrantha*
- *Leucaena leucocephala*
- *Ipomoea carnea*
- *Salvinia molesta*
- *Pistia stratiotes*
- *Alternanthera philoxeroides*
- *Ageratum conyzoides*
- *Amaranthus spinosus*

PYQ REFERENCE:

Q. Why is a plant called *Prosopis juliflora* often mentioned in news?

- (a) Its extract is widely used in cosmetics.
- (b) It tends to reduce the biodiversity in the area in which it grows.**
- (c) Its extract is used in the synthesis of pesticides.
- (d) None of these

Source: <https://www.downtoearth.org.in/forests/red-alert-over-green-menace-how-south-india-is-fighting-back-against-the-senna-invasion>

51. State Energy Efficiency Index 2024

51. The State Energy Efficiency Index 2024 is released by

- (a) NITI Aayog
- (b) Bureau of Energy Efficiency (BEE)
- (c) Central Electricity Authority (CEA)
- (d) International Energy Agency (IEA)

Answer: (b) Bureau of Energy Efficiency (BEE)

In NEWS: The State Energy Efficiency Index (SEEI) 2024, released by the Union Ministry of Power, ranks Maharashtra first among 36 states and Union Territories (UTs) for fiscal year 2023-24.

State Energy Efficiency Index (SEEI) 2024

- Released in August 2025 by the Bureau of Energy Efficiency (BEE), Ministry of Power, in collaboration with the Alliance for an Energy Efficient Economy (AEEE). It evaluates 36 states and union territories for FY 2023-24.
- It is the 6th edition, featuring an implementation-focused framework with 66 indicators across seven sectors: buildings, industry, municipal services, transport, agriculture, DISCOMs, and cross-sector initiatives.

Performance Classification

- States/UTs are classified into four categories based on their index scores:
 - Front Runners (above 60%)
 - Achievers (50-60%)
 - Contenders (30-50%)
 - Aspirants (below 30%)

Top Performers by Energy Consumption Groups

- Based on Total Final Energy Consumption (TFEC) groups:
 - Group 1 (>15 MToE): Maharashtra topped.
 - Group 2 (5-15 MToE): Andhra Pradesh led.
 - Group 3 (1-5 MToE): Assam performed best.
 - Group 4 (<1 MToE): Tripura ranked highest.

Highlights

- The number of Front Runners dropped from 7 to 5—these include Maharashtra, Andhra Pradesh, Karnataka, Telangana, and Tamil Nadu.
- Assam and Kerala made it into the Achievers category.
- Contenders include: Haryana, Punjab, Rajasthan, Odisha, and Uttar Pradesh.

Sectoral progress:

- 24 states have notified Energy Conservation Building Code (ECBC) 2017.
- 31 states adopted electric mobility policies.
- Kerala leads with 74% adoption of solar-powered agricultural pumps.
- All 36 states/UTs have prepared State Energy Efficiency Action Plans (SEEAPs).

- 31 states/UTs have established State-Level Steering Committees on Energy Transition.

Significance

- Implementation-focused framework aligns with emerging priorities like ESCO models, star-rated buildings, PAT scheme expansion, MSME profiling, EV demand-side incentives, and DSM efforts by DISCOMs.
- SEEI 2024 acts as a policy and governance tool, encouraging federal competitiveness, sharing of best practices, and tracking progress toward India's net-zero goals for 2070.

PYQ REFERENCE:

Q. On which of the following can you find the Bureau of Energy Efficiency Star Label?

1. Ceiling fans
2. Electric geysers
3. Tubular fluorescent lamps

Select the correct answer using the code given below.

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

Source: <https://www.gktoday.in/state-energy-efficiency-index-2024/>

52. Rosewood tree

52. Consider the following statements about Rosewood (Dalbergia latifolia):

1. It is a large evergreen tree that grows up to 40 meters tall.
2. It is native to the Indian subcontinent and Southeast Asia.
3. It is listed under CITES Appendix II for regulated trade.
4. It is classified as Vulnerable in the IUCN Red List.

Which of the above statements is/are correct?

- (a) II and IV only
(b) I, II and III
(c) II, III and IV
(d) I and III only

Answer: (c) II, III and IV

In NEWS: Tamil Nadu has lowest density of rosewood tree population in south India, finds study

About Rosewood Tree

- Scientific name: Dalbergia latifolia (Indian rosewood, also called "shisham" in some regions).
- Family: Fabaceae (Legume family).
- Native to: Indian subcontinent and Southeast Asia.
- Grows in moist deciduous forests of South India (Karnataka, Kerala, Tamil Nadu, Andhra Pradesh).

Characteristics

- A large deciduous tree which grows up to 40 meters tall.

- Timber: Hard, durable, and richly grained, with fragrant rose-like scent.
- Wood is dark brown to purple-brown, valued for furniture and musical instruments.
- Leaves: Compound, with 5–7 leaflets.
- Flowers: Small, white to pink, fragrant.
- Fruits: Flat pods containing 1–4 seeds.

Uses

- Highly prized for furniture, decorative veneers, musical instruments (like guitars, violins, sitars).
- Used in plywood, carvings, luxury flooring.
- Considered a valuable export timber.

Conservation Status

- Listed in CITES Appendix II (regulated trade).
- Overexploited due to high commercial demand.
- Classified as Vulnerable (IUCN Red List).
- Export of rosewood logs from India is restricted under the Foreign Trade Policy.

Significance

- Known as "King of Timbers" in India for its quality and beauty.
- Provides livelihood for artisans, woodworkers, and local industries.
- Plays an ecological role in moist deciduous forests.

PYQ REFERENCE:

Q. Consider the following :

1. Cashew
2. Papaya
3. Red sanders

How many of the above trees are actually native to India?

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

Source: <https://www.thehindu.com/news/national/tamil-nadu/tamil-nadu-has-lowest-density-of-rosewood-tree-population-in-south-india-finds-study/article69995928.ece>

53. AIR QUALITY LIFE INDEX 2025

53. With reference to the Air Quality Life Index (AQLI) 2025, consider the following statements:

1. It measures the impact of air pollution on life expectancy.
2. It is released annually by the World Health Organization (WHO).
3. According to the 2025 report, India accounts for the highest number of total life years lost globally due to PM_{2.5} pollution.

Which of the statements given above is/are correct?

- (a) 1 only
(b) 1 and 3 only

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

Answer: A. 1 only

Explanation:

In NEWS: All of India breathes bad air, AQLI 2025 report says

AIR QUALITY LIFE INDEX 2025:

● It is produced by the **Energy Policy Institute at the University of Chicago (EPIC)**. **Hence Statement 2 is incorrect**

● The index is grounded in rigorous, peer-reviewed economic research by EPIC's director Michael Greenstone and his team, translating PM_{2.5} pollution levels into their life expectancy impacts. **Hence Statement 1 is correct**

Global Impact

● Based on data from 2023, the report indicates that meeting the WHO's air pollution guideline would have dramatically improved global health:

● Globally, the average person would have gained 1.9 years of life expectancy.

● In aggregate, that translates to 15.1 billion life years added worldwide

● Across India, average life expectancy is reduced by 3.5 years due to PM_{2.5} pollution—if levels were brought down to WHO standards, life expectancy would increase by this much

● In Delhi, the toll is even higher: an average resident could live 8.2 years longer if PM_{2.5} concentrations were reduced to meet WHO guidelines

Regional Patterns

● South Asia remains the most polluted region globally. Delhi, in particular, leads as the city with the largest potential life expectancy gain from improved air quality

India's Rank in Total Life Years Lost

● While the 2025 AQLI report highlights that India faces one of the largest per-person life expectancy losses due to PM_{2.5}, it does not explicitly state that India accounts for the highest total life years lost globally. **Hence Statement 3 is incorrect**

PYQ REFERENCE: (2022)

Q. In the context of WHO Air Quality Guidelines, consider the following statements:

1. The 24-hour mean of PM_{2.5} should not exceed 15 µg/m³ and annual mean of PM_{2.5} should not exceed 5 µg/m³.
2. In a year, the highest levels of ozone pollution occur during the periods of inclement weather.
3. PM₁₀ can penetrate the lung barrier and enter the bloodstream.
4. Excessive ozone in the air can trigger asthma.

Which of the statements given above are correct?

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

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/all-of-india-breathes-bad-air-aqli-2025->

report-

[says/article69994433.ece#:~:text=According%20to%20the%20Air%20Quality,limit%20of%205%20%CE%BCg%2Fm%20%20B3.](https://www.thehindu.com/sci-tech/energy-and-environment/all-of-india-breathes-bad-air-aqli-2025-)

54.National Designated Authority for Carbon Markets

54. With reference to the 'National Designated Authority for Carbon Markets (NDA-CM)' in India, consider the following statements:

1. According to the Energy Conservation (Amendment) Act, 2022, Carbon Market is a market-based mechanism where carbon credits are traded to incentivize reduction of greenhouse gas (GHG) emissions.
2. NDA - CM is responsible for the authorization of carbon credit trading projects under Article 6 of the Paris Agreement.
3. One of its functions is to authorize international carbon credit trading projects aligned with India's Nationally Determined Contributions (NDCs).

Which of the statements given above are correct?

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

Answer: (c) 1, 2 and 3

Explanation:

In NEWS:

The Energy Conservation (Amendment) Act, 2022 formally introduced provisions for a carbon credit trading scheme:

● It defines the carbon market as a market-based approach to encourage emission reductions by allowing trading of carbon credit certificates **Hence Statement 1 is correct**

Main Aim of the National Designated Authority for Carbon Markets (NDA-CM) - As per Government of India:

The main aim of the National Designated Authority for the Implementation of the Paris Agreement (NDAIAPA) - now referred to as the National Designated Authority for Carbon Markets (NDA-CM) - is:

● To oversee and regulate carbon market mechanisms in India, particularly in alignment with Article 6 of the Paris Agreement, and to authorize bilateral/multilateral carbon credit trading projects.

Official Purpose and Functions (as per MoEFCC notification, 2022):

According to the **Ministry of Environment, Forest and Climate Change (MoEFCC) notification dated May 30, 2022, the NDA-CM was set up:**

● "To serve as the national authority to approve Article 6-compliant projects and ensure environmental integrity, transparency, and alignment with India's climate goals."

Core Aims of NDA-CM:

- Authorize International Carbon Credit Projects
- Appraises and authorizes bilateral and multilateral carbon market projects under Article 6.2 and 6.4 of the Paris Agreement. **Hence Statement 2 is correct**
- Ensure Alignment with National Interests.

- Ensures that carbon trading aligns with India's Nationally Determined Contributions (NDCs) and developmental priorities **Hence Statement 3 is correct**
- Promote Environmental Integrity.
- Verifies that all carbon market projects contribute to real, measurable, and verifiable emission reductions, maintaining transparency and environmental integrity.
- Support Carbon Market Framework.
- Works with other government agencies (like BEE) to help develop India's compliance-based carbon credit market under the Energy Conservation (Amendment) Act, 2022.
- Facilitate International Cooperation.
- Represents India in international climate negotiations and bilateral arrangements related to carbon markets.

PYQ REFERENCE: (2023)

Q. Consider the following statements:

Statement-I : Carbon markets are likely to be one of the most widespread tools in the fight against climate change.

Statement-II : Carbon markets transfer resources from the private sector to the State.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
 (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
 (c) Statement-I is correct but Statement-II is incorrect
 (d) Statement-I is incorrect but Statement-II is correct

Source:

<https://www.thehindu.com/news/national/environment-ministry-finalises-national-designated-authority-to-kickstart-carbon-markets/article69979886.ece>

55. Blue dragons

55. The Blue Dragon (*Glaucus atlanticus*) is best described as:

- (a) A nudibranch sea slug adapted to feed on venomous siphonophores
 (b) A plankton species feeding on phytoplankton
 (c) A coral polyp dependent on symbiotic algae
 (d) A cephalopod mollusk related to squids and octopuses

Answer: (a) A nudibranch sea slug adapted to feed on venomous siphonophores

Explanation:

In NEWS: Several beaches in Spain and Famara beaches in Lanzarote were closed earlier this month after blue dragons began to wash ashore.



Blue Dragon:

- Blue Dragon (*Glaucus atlanticus*) is a small blue sea slug (nudibranch). **Hence option (a) is correct.**
- It is found in warm ocean waters of the Atlantic, Pacific, and Indian Oceans.
- The creature floats upside down on the water surface using an air bubble in its stomach.
- It shows countershading: blue on top (camouflage with water/sky) and silvery below (camouflage with sunlight).
- It feeds on venomous siphonophores like the Portuguese Man o' War and stores their venom in its tissues.
- Its sting can be more painful than the original prey's venom and harmful to humans.
- Size is typically 3–4 cm in length.
- Occasionally spotted on Indian coasts (Goa, Kerala) and reported in news.
- Plays a role in marine biodiversity and ecological adaptation studies.
- Conservation status: Not endangered, but populations depend on ocean currents.

56. Himalayan brown bear

56. Consider the following statements with respect to Himalayan brown bear:

1. It is a subspecies of the Brown Bear found only in India.
2. They maintain large territories and mark them with scent to avoid direct encounters.
3. As apex scavengers, these bears contribute to nutrient cycling in alpine ecosystems.
4. Deosai National Park in Pakistan and the Great Himalayan National Park in India are the two notable protected areas of the species.

Which of the statements given above are correct?

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

Answer: (d) 2, 3 and 4

Explanation:

In NEWS: Human-induced climate change and bears' habituation to human-made food is causing conflict to rise

Himalayan brown bear:

- It is a subspecies of the Brown Bear, found in India, Pakistan, Nepal, and Tibet. **Hence statement 1 is incorrect.**
- It has a light brown to sandy or reddish coat – hence also called the "Isabelline Bear".
- It is omnivorous: eats roots, fruits, insects, small mammals, and carrion.
- Enters hibernation in winter, usually from November to March in self-dug snow or rock dens
- It is solitary and territorial, except during mating or with cubs.
- As apex scavengers and predators, bears help regulate herbivore populations and contribute to nutrient cycling in alpine ecosystems. **Hence statement 3 is correct.**
- They maintain large territories and mark them with scent to avoid direct encounters. **Hence statement 2 is correct.**
- They are most active during dawn, dusk, and at night to avoid human encounters.

Distribution in India

Found in the Western Himalayas, especially:

- Ladakh
- Himachal Pradesh (Lahaul-Spiti, Pangi Valley)
- Uttarakhand (rare)
- Jammu & Kashmir (Kishtwar, Suru Valley, Thajiwas)



Conservation Status

- IUCN Red List - Critically Endangered (India)
- Wildlife Protection Act (India) - Schedule I

Conservation Efforts:

Protected Areas:

- Deosai National Park (Pakistan): Bear numbers rose from 19 in 1993 to 78 in 2022 due to effective protection
- Great Himalayan National Park (India): Important habitat and refuge within protected network **Hence statement 4 is correct.**

Community Engagement:

- In Ladakh's Drass region, community "Bear Guardian" initiatives, workshops, and monitoring have reduced attacks and strengthened coexistence

Primary conflict drivers include:

- Anthropogenic food sources
- Livestock grazing in bear habitats
- Lack of community awareness

Mitigation recommendations:

- Better crop/waste management
- Supervised grazing
- Community watch groups
- Establishing protected zones

PYQ REFERENCE: (2020)

Q. Which one of the following protected areas is well-known for the conservation of a sub-species of the Indian swamp deer (Barasingha) that thrives well on hard ground and is exclusively graminivorous?

- (a) Kanha National Park
- (b) Manas National Park
- (c) Mudumalai Wildlife Sanctuary
- (d) Tal Chhapar Wildlife Sanctuary

Source: <https://www.downtoearth.org.in/wildlife-biodiversity/quratulain-balouch-may-have-survived-a-himalayan-brown-bear-attack-but-conflict-between-these-ionic-ursids-and-humans-is-already-increasing-across-the-himalayas>

57. Bandipur Tiger Reserve

57. With reference to Bandipur Tiger Reserve, consider the following statements:

1. It is a part of the Nilgiri Biosphere Reserve.
2. The Kabini River flows through the reserve.
3. It was declared a Tiger Reserve under Project Tiger in 1973.

How many of the above statements are correct?

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

Answer: (c) All three

Explanation:

In NEWS: Elephant electrocuted in Bandipur Tiger Reserve

Bandipur Tiger Reserve:

- Bandipur Tiger Reserve is located in **Karnataka**, in the **Chamarajanagar district**.
- It is part of the **Nilgiri Biosphere Reserve**, along with Nagarhole (Karnataka), Mudumalai (Tamil Nadu) and Wayanad (Kerala). **Hence statement 1 is correct.**
- It lies at the confluence of the **Deccan Plateau and the Western Ghats**.
- The **Kabini River** flows through the northern boundary of the reserve. **Hence statement 2 is correct.**

History

- Bandipur was established as a **Wildlife Sanctuary in 1931**.
- It was upgraded to a **National Park in 1974**.
- In 1973, it was brought under **Project Tiger** and designated a **Tiger Reserve. Hence statement 3 is correct.**

Flora & Fauna

- Vegetation includes **tropical deciduous forests, dry scrub, and grassy woodlands**.
- Major fauna: **Bengal tiger, Asian elephant, Indian leopard, sloth bear, dhole (wild dog), gaur (Indian bison), chital, sambhar deer**.

- It is part of the **largest contiguous tiger habitat** in India (with Mudumalai, Nagarhole and Wayanad).

Conservation Significance

- It serves as a **critical wildlife corridor** of the Nilgiri Biosphere, ensuring genetic exchange of tigers and elephants.
- The reserve faces threats from **forest fires, highway traffic (NH-766 and NH-67), human-wildlife conflict, and encroachment.**

PYQ REFERENCE: (2017)

Q. From the ecological point of view, which one of the following assumes importance in being a good link between the Eastern Ghats and the Western Ghats?

- (a) Sathyamangalam Tiger Reserve
(b) Nallamala Forest
(c) Nagarhole National Park
(d) Seshachalam Biosphere Reserve

Source:

<https://www.thehindu.com/news/national/karnataka/elephant-electrocuted-in-karnatakas-bandipur-tiger-reserve/article70034412.ece#:~:text=An%20elephant%20was%20electrocuted%20on,in%20the%20Bandipur%20Tiger%20Reserve.>

58. Annual Conference on Oceans Law & Policy (COLP48)

58. With reference to 'COLP48', sometimes seen in the news, consider the following statements:

1. It is a global forum advancing maritime stability, security, and sustainable development.
2. It is the first time the COLP is hosted in the Indian subcontinent.

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

Answer: (c) Both 1 and 2

Explanation:

In NEWS: For the First Time in Nearly 50 Years, India Hosted COLP48, Strengthening Its Role in Ocean Governance

COLP48 (48th Annual Conference on Oceans Law & Policy):

- The 48th Conference on Oceans Law & Policy (COLP48) is a global forum advancing maritime stability, security, and sustainable development. **Hence statement 1 is correct.**
- The theme of COLP48 is *"Developing World Approaches to Ocean Governance: Perspectives from the Indian Ocean Rim"*.
- It is the **first time** the COLP is being hosted in the **Indian subcontinent.** **Hence statement 2 is correct.**

Key Themes / Issues to Be Addressed:

- Key focus areas include the **triple planetary crisis** – biodiversity loss, climate change, and ocean pollution.

- The conference discusses **seabed minerals, offshore oil & gas, and critical infrastructure** in oceans.
- It covers **fisheries, food security, and the BBNJ Agreement (Biodiversity Beyond National Jurisdiction).**
- Issues of **maritime trade, shipping, and security** are also central to the discussions.
- The role of **emerging technologies and AI in ocean governance** is highlighted.
- Special attention is given to the concerns of **Small Island Developing States (SIDS) and non-state actors.**
- The conference explores the **future of ocean governance in the Indian Ocean region** from a **Global South perspective.**
- It provides India an opportunity to strengthen its role in **blue economy, maritime security, and ocean governance diplomacy.**

PYQ REFERENCE: (2016)

Q. With reference to 'Agenda 21', sometimes seen in the news, consider the following statements:

1. It is a global action plan for sustainable development.
2. It originated in the World Summit on Sustainable Development held in Johannesburg in 2002.

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2165373>

59. India's net-zero target

59. With reference to "Net-Zero emissions", which of the following statements is/are correct?

- I. India announced its Net-Zero emissions target for 2070 at the COP26 UNFCCC Conference
- II. India is the third-largest emitter of greenhouse gases after China and the USA.

Select the answer using the code given below:

- (a) I only
(b) II only
(c) Both I and II
(d) Neither I nor II

Answer: (c) Both I and II

Explanation:

In NEWS: Sustainable aviation fuel policy in the works as India targets Net Zero by 2070

India's Net-Zero Target:

- India announced its **Net-Zero emissions target for 2070** at the **COP26 UNFCCC Conference (Glasgow, 2021).** **Hence statement I is correct.**

- The target means that by 2070, India will **balance greenhouse gas emissions with their removal** (through carbon sinks, renewables, technology, etc.).

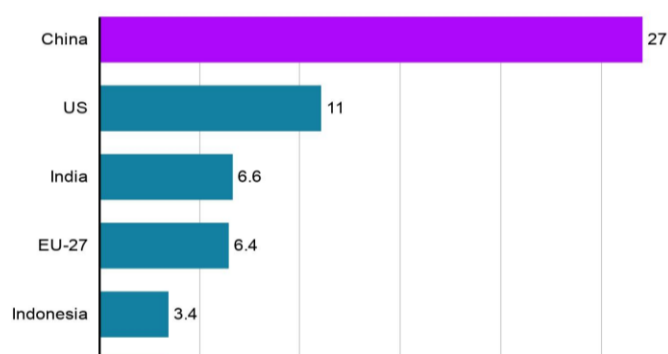
India's 5 Commitments (Panchamrit - announced by PM Modi at COP26)

- By 2030, India will reach **500 GW of non-fossil fuel energy capacity**.
- By 2030, India will meet **50% of its energy requirements from renewable sources**.
- India will reduce its **total projected carbon emissions by 1 billion tonnes** by 2030.
- India will reduce the **emissions intensity of GDP by 45%** (from 2005 levels) by 2030.
- India will achieve **Net Zero emissions by 2070**.

Significance

- India is the **third-largest emitter** of greenhouse gases (after China and the USA). **Hence statement II is correct.**
- Despite this, India's **per capita emissions** are far below the global average.
- The 2070 target balances **climate responsibility with developmental needs** (energy security, poverty reduction, industrial growth).

Greenhouse gas emissions (%)



Steps Taken Towards Net-Zero

- Expansion of **solar and wind power** (world's largest solar capacity addition program).
- Launch of **National Hydrogen Mission (2021)** to promote green hydrogen.
- **Energy Efficiency schemes** - PAT (Perform, Achieve, Trade), UJALA, EESL initiatives.
- **Electric Mobility push** - FAME II scheme, EV adoption targets.
- **Carbon markets and green bonds** to finance clean energy.

PYQ REFERENCE: (2025)

Q. Consider the following statements:

- Carbon dioxide (CO₂) emissions in India are less than 0.5 t CO₂/capita.
- In terms of CO₂ emissions from fuel combustion, India ranks second in the Asia-Pacific region.
- Electricity and heat producers are the largest sources of CO₂ emissions in India.

Which of the statements given above is/are correct?

- I and III only
- II only
- II and III only**
- I, II and III

Source:

<https://www.downtoearth.org.in/energy/sustainable-aviation-fuel-policy-in-the-works-as-india-targets-net-zero-by-2070>

60. India's progress in SDG 11

60. Which of the following urban indicators are used to assess India's progress under Sustainable Development Goal 11 (SDG 11)?

- Proportion of slum population
- PM 2.5 air pollution levels
- Access to piped water
- Availability of public transport

Select the correct answer using the code given below:

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

Answer: (d) 1, 2, 3 and 4

Explanation:

In NEWS: India's progress on key urban indicators has been slow or negative. This marks persistent issues in urban living conditions, infrastructure and governance.

India's progress in Sustainable Development Goal 11 (SDG 11):

- India's ranking in SDR 2025 improved to 99th among 167 countries, but SDG 11 (sustainable cities) remains weak.

SDG 11 major indicators in India

- Proportion of slum population.
- PM 2.5 air pollution levels.
- Access to piped water.
- Availability of public transport. **Hence all are correct.**

Performance

- Slum population and air pollution stagnated.
- Piped water access declined (only 65% in 2022).
- Water supply irregular, quality poor (e.g., Mumbai 5 hrs/day).

Urban Slums

- Nearly 50% slum households in non-pucca homes.
- Water supply in slums = 45 LPCD vs govt norm 135 LPCD.
- Slum dwellers pay up to 30× more for tanker water.

Vulnerabilities

- Urban poor face high pollution & climate risks (floods, landslides).
- Inadequate resilience measures increase health & income risks.

Governance Issues

- Urban development is a State subject; cities lack autonomy.
- Over half of municipal corporations cannot cover even 50% of their expenses from their own revenue.
- Smaller cities lack creditworthiness to attract private investment.

Urban Programmes

- JNNURM & Smart City Mission focus more on large cities & commercial areas.

- <20% Smart City projects address water, sanitation, health.
- PMAY-U excludes many poor due to weak creditworthiness.
- PMAY-U 2.0 offers credit risk guarantees to improve inclusivity.

PYQ REFERENCE: (2016)

Q. Consider the following statements:

1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The Sustainable Development Goals have to be achieved by 2030.

Which of the statements given above is / are correct?

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

Source: <https://www.gktoday.in/indias-urban-sustainability-challenges-and-sdg-11-progress/>

61. Koalas

61. With reference to Koalas, consider the following statements:

1. They are arboreal marsupial mammals native to India.
2. They are currently listed as Endangered in the IUCN Red List.
3. Koala Chlamydia Vaccine is the world's first vaccine approved for a marsupial species.

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: Australia approves first vaccine to save koalas from chlamydia

Koala Chlamydia Vaccine (2025)

- **World's first vaccine** approved in Australia to save koalas from chlamydia. **Hence statement 3 is correct.**
- **Chlamydia impact** – causes blindness, infertility, death; in some populations, **50–70% infection rates.**
- **Features** –
 - Single dose, no booster needed
 - Provides **protection + reduces progression + reverses some symptoms**
 - Could reduce mortality by ~65%

Koala:

- **Scientific Name** – *Phascolarctos cinereus*
- **Type** – Arboreal, marsupial mammal (pouch-bearing).

- **Distribution** – Native to **Australia**, mainly in Queensland, New South Wales, Victoria, and South Australia. **Hence statement 1 is incorrect.**

- **Habitat** – Eucalyptus forests and woodlands.
- **Diet** – Specialist **folivore** (feeds mainly on eucalyptus leaves).
- **IUCN Red List** – **Vulnerable** (globally). **Hence statement 2 is incorrect.**
- **Australian Status** – Listed as **endangered** in eastern Australia (Queensland, New South Wales, ACT) under the EPBC Act (2022).
- **Threats** –
 - Habitat loss due to urbanization & deforestation
 - Bushfires (e.g., 2019–20 Black Summer)
 - Climate change (heat stress, drought)
 - Road kills, dog attacks
 - Diseases: especially **chlamydia infection**



PYQ REFERENCE: (2012)

Q. Which one of the following groups of animals belongs to the category of endangered species?

- (a) Great Indian Bustard, Musk Deer, Red Panda and Asiatic Wild Ass**
- (b) Kashmir Stag, Cheetal, Blue Bull and Great Indian Bustard
- (c) Snow Leopard, Swamp Deer, Rhesus Monkey and Saras (Crane)
- (d) Lion-tailed Macaque, Blue Bull, Hanuman Langur and Cheetal

Source: <https://www.thehindu.com/sci-tech/science/australia-approves-worlds-first-vaccine-to-save-koalas-from-chlamydia/article70048638.ece>

62. Flamingos

62. The Tanzanian government recently halted soda ash mining near a lake which has been a Ramsar Site since 2001 and the only breeding ground for Lesser Flamingos in East Africa. The lake mentioned above is

- (a) Lake Natron
- (b) Lake Faguibine
- (c) Lake Oguta
- (d) Lake Volta

Answer: (a) Lake Natron

Explanation:

In NEWS: Tanzania halts soda ash mining to save world's Lesser Flamingos

Lake Natron and the Lesser Flamingoes:

- Lake Natron in northern Tanzania is a critical breeding ground for the Lesser Flamingos, supporting between 1.5 and 2.5 million birds each year — about 75% of the global population.
- The lake has been designated a Ramsar Site since 2001, reflecting its international ecological importance. **Hence option (a) is correct.**
- A proposed large-scale soda ash mining project by Ngaresero Valley Company Ltd was halted by the Tanzanian government.
- Concerns included risks to flamingos, disruption of the fragile ecosystem, diversion of freshwater, and negative impacts on Maasai communities who rely on the lake for grazing, water and income from tourism.
- The government's decision emphasizes sustainable development: large industrial extraction is disallowed, but small-scale, traditional collection of soda ash at the lake's edge is permitted.



Lesser flamingo:

- The lesser flamingo (*Phoeniconaias minor*) is a species of flamingo occurring in sub-Saharan Africa and western India.
- The Lesser Flamingo is the smallest species of flamingo.
- Plumage is mostly pinkish-white, with a more extensively black bill than in greater flamingos.
- They feed primarily on *Spirulina* algae and other cyanobacteria that grow in highly alkaline lakes. Their bills are adapted for filtering tiny food items.
- Native to sub-Saharan Africa and western India.
- Breed principally on Lake Natron in Tanzania. Other African breeding sites include Etosha Pan, Makgadikgadi Pan, Kamfers Dam. In South Asia, breeding occurs in certain salt pans in northwestern India.
- They lay a single egg (chalky-white) on a mud mound; after hatching, chicks join large creches (groups) and are led by adults to freshwater sources, sometimes walking long distances.

Threats & Conservation Status:

- Classified as Near Threatened by IUCN.
- Threats include:
 - Loss or degradation of breeding sites.
 - Pollution (heavy metals, etc.).
 - Industrial projects (like soda ash mining) that might affect water quality or hydrology.
 - Rising water levels in East African soda lakes altering lake productivity.

PYQ REFERENCE:

Q. Which one of the following lakes of West Africa has become dry and turned into a desert?

- (a) Lake Victoria
- (b) Lake Faguibine**
- (c) Lake Oguta
- (d) Lake Volta

Source: <https://www.downtoearth.org.in/africa/tanzania-halts-soda-ash-mining-to-save-worlds-lesser-flamingos>

63. Montreal Protocol

63. With reference to the Montreal Protocol, consider the following statements:

1. It is a legally binding international treaty under the Vienna Convention for the Protection of the Ozone Layer.
2. The Kigali Amendment to the Protocol deals with phasing out Hydrofluorocarbons (HFCs) which is the potential source for Ozone depletion.
3. India has not yet ratified the Kigali Amendment.

How many of the above statements are correct?

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

Answer: (a) Only one

Explanation:

In NEWS: MoEFCC celebrated 31st World Ozone Day to commemorate the signing of the Montreal Protocol

Montreal Protocol:

- **Adoption:** Signed on **16 September 1987**; entered into force on **1 January 1989**.
- **Objective:** To phase out the production and consumption of **ozone-depleting substances (ODS)** such as CFCs, halons, carbon tetrachloride, methyl chloroform, etc.
- **Legal Status:** A **legally binding international treaty** under the **Vienna Convention for the Protection of the Ozone Layer (1985)**. **Hence statement 1 is correct.**
- **Membership:** Universal ratification — all **198 UN member states are parties** (the first treaty in UN history to achieve this).

Amendments / Adjustments:

- **London (1990)** – tightened controls, added new ODS.
- **Copenhagen (1992)** – accelerated phase-out schedules.
- **Montreal (1997) & Beijing (1999)** – further ODS controls.
- **Kigali Amendment (2016)** – added **Hydrofluorocarbons (HFCs)** (though HFCs do not deplete ozone, they are potent greenhouse gases). **Hence statement 2 is incorrect.**
- **Financial Mechanism:** The **Multilateral Fund (MLF)** established in 1991 helps developing countries meet compliance costs.

India's Role:

- India has been a party since 1992. **Hence statement 3 is incorrect.**
- Phased out production and consumption of several ODS as per timelines.
- Ratified the **Kigali Amendment in 2021.**

Achievements:

- Nearly **99% of ODS phased out** globally.
- Ozone layer showing signs of recovery — expected to return to 1980 levels by **2066 over Antarctica.**
- Also contributed to **climate change mitigation**, since ODS are also greenhouse gases.
- **Importance:** Considered the **most successful environmental treaty** ever, with universal participation and effective compliance mechanisms.

PYQ REFERENCE: (2015)

Q. Which one of the following is associated with the issue of control and phasing out of the use of ozone-depleting substances?

- (a) Bretton Woods Conference
- (b) Montreal Protocol**
- (c) Kyoto Protocol
- (d) Nagoya Protocol

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2167243>

64. "Operation Weed Out"

64. Hydroponic weed, recently seen in news which is seized under "Operation WeedOut", is:

- (a) A synthetic narcotic produced using chemical compounds.
- (b) A high-potency cannabis grown without soil, using nutrient-rich solutions.
- (c) A hallucinogenic drug derived from opium poppy.
- (d) A pharmaceutical sedative misused as a recreational drug.

Answer: (b) A high-potency cannabis grown without soil, using nutrient-rich solutions.

Explanation:

In NEWS: DRI continues crackdown on drug trafficking syndicates under "Operation Weed Out"

Operation Weed Out:

- Operation Weed Out is a **pan-India anti-narcotics crackdown** launched by the **Directorate of Revenue Intelligence (DRI)** to target and dismantle drug trafficking syndicates, specifically those smuggling hydroponic cannabis (weed) into India.
- Supports the Government of India's "**Nasha Mukh Bharat (Drug-Free India)**" initiative.
- Reinforces **India's zero-tolerance policy** against narco-terror and cross-border smuggling.
- Sends a strong message to international drug syndicates using Indian airports.

Objective:

- To identify, intercept, and eliminate illegal networks smuggling **hydroponically grown cannabis (A high-grade cannabis grown using nutrient-rich water, often indoors)** into India, primarily from Thailand and other Southeast Asian countries. **Hence option (b) is correct.**

Operational Focus:

- Hydroponic weed smuggling via airports and courier networks
- Intelligence-based targeting of syndicates
- Coordinated action across multiple Indian cities
- Arrest of carriers, receivers, and financiers

How the Operation Works:

- **Intelligence Gathering:** Surveillance and intel-sharing with foreign and domestic agencies.
- **Passenger Profiling:** Monitoring suspicious air passengers, often coming from Bangkok, Thailand.
- **Baggage Scanning:** Seizure of concealed cannabis in checked-in luggage.
- **Follow-up Raids:** Immediate action to arrest the receivers and trace the financing.
- **Legal Action:** Arrests under the **NDPS Act, 1985.**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2167182>

65. Gandhi Sagar Wildlife Sanctuary

65. Gandhi Sagar Wildlife Sanctuary is located in which one of the following states?

- (a) Rajasthan
- (b) Madhya Pradesh
- (c) Uttar Pradesh
- (d) Chhattisgarh

Answer: (b) Madhya Pradesh

Explanation:

In NEWS: Female cheetah to be relocated from Kuno to Gandhi Sagar on September 17

Gandhi Sagar Wildlife Sanctuary:

- Gandhi Sagar Wildlife Sanctuary is located in Mandsaur and Neemuch districts of Madhya Pradesh. **Hence option (b) is correct.**
- It was declared a Wildlife Sanctuary in 1974.
- The sanctuary spreads over about 368 sq km.
- It lies along the Chambal River and around the Gandhi Sagar Dam.
- The terrain consists of dry deciduous forests, hills, valleys, and river ravines.
- Major vegetation includes teak, kardhai, salai, tendu, khair, palash, etc.
- Common fauna include chinkara, nilgai, sambar, wild boar, leopards, and several bird species.
- It is an important site for migratory water birds in winter.
- The Gandhi Sagar reservoir enriches the region's aquatic biodiversity.

- The sanctuary is part of the proposed Chambal–Gandhi Sagar Tiger Reserve.
- It is promoted as a site for eco-tourism and birdwatching in Madhya Pradesh.

PYQ REFERENCE: (2017)

Q. Recently there was a proposal to translocate some of the lions from their natural habitat in Gujarat to which one of the following sites?

- (a) Corbett National Park
- (b) Kuno Palpur Wildlife Sanctuary**
- (c) Mudumalai Wildlife Sanctuary
- (d) Sariska National Park

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/female-cheetah-to-be-relocated-from-kuno-to-gandhi-sagar-on-september-17/article70058125.ece>

66. Hathei Chilli

66. Hathei Chilli which received the Geographical Indication (GI) tag in 2021 is an indigenous chilli variety cultivated in which of the following states?

- (a) Meghalaya
- (b) Andhra Pradesh
- (c) Maharashtra
- (d) Manipur**

Answer: (d) Manipur

Explanation:

In NEWS: Manipur inaugurates Three-Day festival to promote GI-Tagged Hathei Chilli

Hathei Chilli:

- Hathei Chilli is an indigenous chilli variety cultivated in the Ukhrul district of Manipur. **Hence option (d) is correct.**
- It is mainly grown by the Tangkhul Naga tribe in and around the village of Sirarakhong.
- The chilli is famous for its vibrant red colour and aromatic, slightly sweet flavour.
- It is not extremely spicy but has a rich taste, making it ideal for pickles and chutneys.
- Hathei Chilli received the Geographical Indication (GI) tag in 2021, recognizing its unique identity and origin.
- The annual Sirarakhong Hathei Festival is held to promote this chilli and local culture.
- It plays a key role in local livelihoods and traditional farming practices.
- Hathei Chilli is grown organically, without the use of chemical fertilizers or pesticides.



PYQ REFERENCE: (2015)

Q. Which of the following has/have been accorded 'Geographical Indication' status?

1. Banaras Brocades and Sarees
2. Rajasthani Daal-Bati-Churma
3. Tirupathi Laddu

Select the correct answer using the code given below:

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

Source: <https://www.newsonair.gov.in/manipur-inaugurates-three-day-festival-to-promote-gi-tagged-hathei-chilli/>

67. The Central Pollution Control Board

Q. Consider the following statements:

1. It is a statutory organisation constituted under the Air (Prevention and Control of Pollution) Act, 1981.
2. The SAMEER App 2.0 is a mobile application launched by the Central Pollution Control Board (CPCB) to provide real-time, location-based updates on the National Air Quality Index (AQI).

Which of the above statement(s) is/are correct?

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

Answer: (b) 2 Only

Explanation:

In NEWS: Union Environment Minister Shri Bhupender Yadav presides over 51st Foundation Day of the Central Pollution Control Board in New Delhi.

- **A technical report on the "Classification of Polluted River Stretches, 2025"** was released, based on national water quality monitoring data.

The Central Pollution Control Board:

- It is a statutory organisation, constituted under **the Water (Prevention and Control of Pollution) Act, 1974. Hence statement 1 is incorrect.**
- CPCB was entrusted with the powers and functions under the **Air (Prevention and Control of Pollution) Act, 1981.**
- It provides technical services to the **Ministry of Environment, Forests, and Climate Change under the Environment (Protection) Act, 1986.**

SAMEER App 2.0:

- The **SAMEER App Version 2.0** was launched, offering an updated user interface, improved citizen engagement, and features like **personalized alerts** and **location-based services.** The app will be available on **Android** and **iOS. Hence statement 2 is correct.**

● **Air Quality Updates:**

o The app provides **hourly updates** on the **National Air Quality Index (AQI)**, helping users stay informed about the air quality in real time.

o It offers AQI data for over **100 cities** across India, ensuring that people across the country can access relevant information.

● **Colour-Coded AQI Representation:**

o The cities are represented in a **colour-coded format**, making it easy for users to quickly understand the air quality. Different colours correspond to different AQI levels, indicating whether the air is **safe** or **hazardous**.

● **Complaint Registration & Tracking:**

o The app allows users to **file and track complaints** related to various pollution sources such as:

- **Garbage dumping**
- **Road dust**
- **Vehicular emissions**
- Other local **pollution issues**.

o This feature promotes citizen participation, empowering people to actively address pollution problems in their communities.

● **Improved Citizen Engagement:**

o The app fosters **greater community engagement** by providing a platform for citizens to contribute to environmental management, especially by reporting local pollution issues.

PYQ REFERENCE: (2018)

Q. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)?

1. The NGT has been established by an Act whereas the CPCB has been created by an executive order of the Government.
2. The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air in the country.

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2169483>

68. The Clean Plant Programme (CPP)

68. The Clean Plant Programme (CPP) is India's initiative with the collaboration of which among the following?

- (a) World Bank
- (b) Asian Development Bank (ADB)
- (c) International Monetary Fund (IMF)
- (d) Food and Agriculture Organization (FAO)

Answer: (b) Asian Development Bank (ADB)

Explanation:

In NEWS: Seeds of the Future: Clean Plant Programme Gaining Momentum

The Clean Plant Programme (CPP):

● India's Clean Plant Program (CPP), conceptualized by the **Ministry of Agriculture & Farmers Welfare** in collaboration with the **Asian Development Bank**. **Hence option (b) is correct.**

● It is a novel initiative aimed at ensuring **healthy, disease-free planting material** of key fruit crops.

● The program seeks to enhance farmers' **productivity and profitability**, ultimately boosting India's global competitiveness.

● **Nine Clean Plant Centres (CPCs)** are to be established across India, equipped with **advanced tissue culture labs and diagnostic facilities**.

● The programme provides **financial assistance to nurseries:** ₹3 crore for large nurseries and ₹1.5 crore for medium nurseries, targeting **production of 8 crore disease-free seedlings annually**.

● Target crops include **fruits** (mango, pomegranate, grapes, citrus, litchi, apple, berries), **nuts** (almond, walnut), and **ornamental plants**.

PYQ REFERENCE: (2015)

Q. 'BioCarbon Fund Initiative for Sustainable Forest Landscapes' is managed by the

- (a) Asian Development Bank
- (b) International Monetary Fund
- (c) United Nations Environment Programme
- (d) World Bank**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2169147>

69. Tamil Nadu Coastal Restoration Mission (TN-SHORE)

69. Which among the following statements is not true with respect to the "Tamil Nadu Coastal Restoration Mission (TN-SHORE)"?

- (a) It is a flagship program launched to restore, protect, and sustainably manage the state's coastal ecosystems by promoting the Blue Economy.
- (b) It aims to establish conservation centers for Sea turtles and dugongs.
- (c) It is being funded by the International Monetary Fund.
- (d) It spans 14 coastal districts of Tamil Nadu, covering approximately 1,076 km of coastline.

Answer: (c) It is being funded by the International Monetary Fund.

Explanation:

In NEWS: World Bank to fund T.N. village councils for mangrove plantation

Tamil Nadu Coastal Restoration Mission (TN-SHORE)

● TN-SHORE (Tamil Nadu Coastal Restoration Mission) is a flagship program launched to **restore, protect, and sustainably**

manage the state's coastal ecosystems while promoting the Blue Economy.

● **Budget & Funding:** The mission has a total outlay of ₹1,675 crore over five years, with the **World Bank contributing ₹1,172.5 crore** and the **state government providing ₹502.5 crore. Hence option (c) is incorrect.**

● **Coverage:** It spans **14 coastal districts** of Tamil Nadu, covering approximately **1,076 km of coastline.**

Objectives:

● **Biodiversity restoration:** Protect and enhance mangroves, coral reefs, seagrass beds, and salt marshes.

● **Coastal protection:** Control erosion, strengthen natural barriers, and improve climate resilience.

● **Livelihood support:** Empower local coastal communities through sustainable resource management.

● **Pollution control:** Reduce marine plastic waste and other pollutants.

Key Initiatives:

● Reviving **coral reefs** in Gulf of Mannar.

● Establishing **botanical gardens** in collaboration with Kew Gardens, UK.

● Sea turtle and dugong conservation centers.

● Restoration of degraded coastal areas like **Ennore Creek.**

Governance & Implementation:

● Managed by a **high-powered steering committee** including state department secretaries, forest officials, and a Chief Mission Director.

● Emphasizes **community participation**, with Village Mangrove Councils overseeing mangrove restoration and local procurement.

Blue Carbon & Sustainability:

● Establishment of a **Tamil Nadu Blue Carbon Agency** to monitor carbon sequestration from mangroves, seagrass, and salt marshes.

● Promotes the **Blue Economy** by balancing ecological restoration with sustainable economic growth.

Targets:

● For 2025-26, the mission plans to restore **~700 hectares of degraded mangroves** and plant **~300 hectares of new mangroves.**

PYQ REFERENCE: (2015)

Q. 'BioCarbon Fund Initiative for Sustainable Forest Landscapes' is managed by the

- (a) Asian Development Bank
- (b) International Monetary Fund
- (c) United Nations Environment Programme
- (d) World Bank**

Source: <https://www.thehindu.com/news/national/tamil-nadu/village-mangrove-councils-in-tamil-nadu-to-handle-world-bank-funds-for-mangrove-plantation/article70084891.ece#:~:text=As%20part%20of%20the%20Tamil.bioshield%20enhancement%20through%20mangrove%20plantations.>

70. Lactifluus khasianus

70. Lactifluus khasianus, sometimes seen in the news, is

- (a) A newly identified butterfly species in the Eastern Himalayas
- (b) A newly identified edible mushroom species in Northeastern states
- (c) An invasive species causing threat to native plants in western ghats
- (d) A fungal species used primarily in traditional medicine for curing skin diseases

Answer: (b) A newly identified edible mushroom species in Northeastern states

Explanation:

In NEWS: New Edible Mushroom Species Discovered In Meghalaya Forests

Lactifluus khasianus:

● *Lactifluus khasianus* is a **recently identified edible mushroom species** discovered in the **East Khasi Hills of Meghalaya, India. Hence option (b) is correct.**

● Locally, it is known as "**Tit iongnah**" by the Khasi tribal communities, who have consumed it for generations.

● It belongs to the genus **Lactifluus**, section **Gerardii**, and grows at an altitude of around **1,600 meters.**

● The species forms **ectomycorrhizal associations** with **Khasi pine (Pinus kesiya)**, aiding nutrient cycles and forest health.

● Morphologically, it is characterized by a **chocolate-brown cap** and larger **cystidia** compared to related species.

● The mushroom is harvested during the **monsoon season** and is an important source of **protein and micronutrients** for local communities.



PYQ REFERENCE: (2022)

Q. With reference to "Gucchi" sometimes mentioned in the news, consider the following statements:

1. It is a fungus.
2. It grows in some Himalayan forest areas.
3. It is commercially cultivated in the Himalayan foothills of north-eastern India.

Which of the statements given above is/are correct?

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

Source: <https://www.gktoday.in/new-edible-mushroom-species-discovered-in-meghalaya-forests/>

71. UN's Seed Treaty

71. Consider the following statements with respect to the International Treaty on Plant Genetic Resources for Food and Agriculture:

- I. It is a legally binding international agreement adopted by the FAO in 2001.
- II. The treaty allows member countries to share seeds and plant materials for research and breeding.
- III. India is not one among the contracting parties to the treaty.

Which of the statements given above is/are correct?

- (a) I and II
- (b) II only
- (c) I and III
- (d) None of the above statements is correct

Answer: (a) I and II

Explanation:

In NEWS: Global farmers' alliance warns against seed treaty reforms that threaten farmers' rights

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA):

- The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), also known as the Seed Treaty, is a **legally binding international agreement** adopted by the FAO in 2001 and in force since 2004. **Hence statement I is correct.**
- As of now, the treaty has over **140 contracting parties**, including India. **Hence statement III is incorrect.**
- The treaty establishes a Multilateral System of Access and Benefit-Sharing for many important crops, facilitating access to these resources for research and breeding under conditions set by the Standard Material Transfer Agreement (SMTA).

Key Objectives:

1. **Conservation and Sustainable Use:** To maintain and ensure the long-term availability of plant genetic resources for food and agriculture, crucial for future food security.
2. **Access and Benefit-Sharing:** To create a global system for exchanging genetic material for research, breeding, and training, with benefits shared with countries of origin.
3. **Farmer's Rights:** To formally recognize the crucial contributions of farmers and indigenous people as custodians of crop diversity.

Multilateral System (MLS):

A key feature of the treaty is the **Multilateral System of Access and Benefit-Sharing**, which:

- Covers **64 key food and forage crops**.
- Allows member countries to **share seeds and plant materials** for research and breeding. **Hence statement II is correct.**
- Requires recipients to share **benefits** (e.g., royalties or technologies) if they commercialize products using those resources.

Farmers' Rights:

The treaty also affirms:

- Protection of **traditional knowledge**.
- **Right to save, use, exchange, and sell farm-saved seeds**.
- Participation in decision-making on genetic resources.

However, implementation of these rights varies widely by country.

Farmers' Concerns on Seed Treaty Reforms:

1. **Expansion of Crop Coverage:** Proposal to include *all* plant genetic resources (beyond current 64 crops) in the Multilateral System may risk **exploitation of traditional and local seed varieties**.
2. **Weak Protection of Farmers' Rights:** Draft reforms **fail to secure farmers' rights to save, use, exchange, and sell their own seeds**.
3. **Biopiracy Risks:** Concern over **corporations patenting traditional seeds** without fair compensation to the communities that developed them.
4. **Unfair Benefit-Sharing:** Despite widespread seed use under the treaty, **benefits rarely reach the original farmers or countries** contributing genetic resources.
5. **Lack of Transparency:** **Unclear who is accessing seeds**, for what purpose, and how benefits are being shared or tracked.
6. **Threat to National Seed Sovereignty:** **Local control over seeds could weaken** if genetic materials become globally accessible without safeguards.
7. **Exclusion from Decision-Making:** Farmers and local groups claim **negotiations favor corporate interests**, with **minimal farmer participation**.

PYQ REFERENCE: (2014)

Q. Consider the following international agreements

1. The International Treaty on Plant Genetic Resources for Food and Agriculture
2. The United Nations Convention to Combat Desertification
3. The World Heritage Convention

Which of the above has/have a bearing on the biodiversity?

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

Source:

<https://www.downtoearth.org.in/agriculture/global-farmers-alliance-warns-against-seed-treaty-reforms-that-threaten-farmers-rights>

72. 2025 Young Champions of the Earth prize

72. 'Young Champions of the Earth Prize' is awarded by the

- (a) United Nations Development Programme (UNDP)
- (b) United Nations Environment Programme (UNEP)
- (c) United Nations Educational, Scientific and Cultural Organization (UNESCO)
- (d) United Nations Framework Convention on Climate Change (UNFCCC)

Answer: (b) United Nations Environment Programme (UNEP)

Explanation:

In NEWS: Indian entrepreneur among winners of UNEP's 2025 Young Champions of the Earth prize

UNEP Young Champions of the Earth Prize – 2025:

- The Young Champions of the Earth Prize is a **global initiative by the United Nations Environment Programme (UNEP)** to recognize and support outstanding environmental innovators under the age of 30. **Hence option (b) is correct.**
- The prize honors young entrepreneurs and change-makers who are developing bold, scalable solutions to address pressing environmental challenges.
- In 2025, **Jinali Mody, a 28-year-old Indian entrepreneur and founder of Banofi Leather, was one of the global winners.**
- Her company, Banofi Leather, produces eco-friendly leather alternatives from banana crop waste, significantly reducing water usage and carbon emissions.
- **Eligibility:**
 - Participants must be between the ages of 18 and 30.
 - They must have at least six months prior experience working on their environmental project.
- **Winners of the UNEP prize receive:**
 - US\$ 20,000 in seed funding
 - Mentorship from experts
 - Global visibility and networking opportunities
- **The 2025 winners also include:**
 - Joseph Nguthiru (Kenya), founder of HyaPak, which creates biodegradable packaging from water hyacinth.
 - Noemi Florea (USA), founder of Cycleau, developing greywater reuse systems for households.
- The prize promotes climate-smart, circular economy, and sustainable development solutions, highlighting the role of youth in building a greener planet.
- The UNEP initiative emphasizes innovation that addresses plastic pollution, water conservation, sustainable agriculture, and clean technology.
- The Young Champions of the Earth programme serves as a platform to empower next-generation environmental leaders across the globe.

Source:

https://www.downtoearth.org.in/environment/indian-entrepreneur-among-winners-of-uneps-2025-young-champions-of-the-earth-prize#google_vignette

73. Ramgarh Vishdhari Tiger Reserve

73. Consider the following statements:

Statement I: Recently, a rare Fishing Cat was discovered at the Ramgarh Vishdhari Tiger Reserve in Rajasthan.

Statement II: Fishing Cats are specially adapted to wetland habitats such as mangroves, marshes, swamps, riverbanks, and floodplains.

Statement III: The Ramgarh Vishdhari Tiger Reserve's landscape consists of dry deciduous forests, grasslands, and riverine ecosystems.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (a) Both Statement II and Statement III are correct and both of them explain Statement I

Explanation:

In NEWS: Rare Fishing Cat Discovered at Ramgarh Vishdhari Tiger Reserve. **Hence statement I is correct.**

Prionailurus viverrinus (Fishing Cat):

- Prionailurus viverrinus, commonly known as the Fishing Cat, is a medium-sized wild cat species native to South and Southeast Asia.
- It is specially **adapted to wetland habitats** such as mangroves, marshes, swamps, riverbanks, and floodplains. **Hence statement II is correct and explains statement I.**
- The species is named "Fishing Cat" due to its unique ability to hunt fish, **using partially webbed front feet to swim and catch aquatic prey.**
- Prionailurus viverrinus is listed as **Vulnerable on the IUCN Red List** due to habitat loss, wetland degradation, and human-wildlife conflict.
- The Fishing Cat is mainly **nocturnal and solitary**, known for its excellent swimming ability, even diving underwater to catch prey.
- It is found in countries like **India, Nepal, Bangladesh, Sri Lanka, Cambodia, Thailand, and Indonesia**, though its population is highly fragmented.
- In India, it is primarily found in the Sundarbans, Terai region, and eastern coastal areas, but was recently discovered in Ramgarh Vishdhari Tiger Reserve, Rajasthan, expanding its known range.
- It is listed under **Schedule I of the Indian Wildlife (Protection) Act, 1972**, offering it the highest level of legal protection in the country.



Ramgarh Vishdhari Tiger Reserve:

- Ramgarh Vishdhari Tiger Reserve is located in the **Bundi district of Rajasthan, India.**
- It was declared the 52nd Tiger Reserve of India and the 4th in Rajasthan in May 2022.
- RVTR acts as a critical tiger corridor between Ranthambhore Tiger Reserve (to the northeast) and Mukundra Hills Tiger Reserve (to the southwest).
- The landscape consists of **dry deciduous forests, grasslands, and riverine ecosystems, supporting diverse wildlife. Hence statement III is correct and explains statement I.**
- It hosts species like tiger, leopard, striped hyena, sloth bear, jackal, nilgai, sambar, chinkara, and various bird and reptile species.
- RVTR is known for its rich biodiversity of small wild cats, including:
 - Jungle Cat (Felis chaus)
 - Rusty-spotted Cat (Prionailurus rubiginosus)
 - Asiatic Wildcat (Felis lybica ornata)
 - Caracal (Caracal caracal)
 - Fishing Cat (Prionailurus viverrinus) – discovered here in 2025 for the first time
- The reserve also holds cultural significance, with ancient temples and historical ruins scattered across the region.

PYQ REFERENCE: (2023)

Q. Which one of the following makes a tool with a stick to scrape insects from a hole in a tree or a log of wood?

- (a) Fishing cat
- (b) Orangutan**
- (c) Otter
- (d) Sloth bear

Source: <https://www.gktoday.in/rare-fishing-cat-discovered-at-ramgarh-vishdhari-tiger-reserve/>

74. Nationally Determined Contributions

74. Which among the following is/are India's 'Nationally Determined Contributions (NDCs)' as mandated under the Paris Agreement?

1. Reduce emissions intensity of GDP by 33–35% by 2030 compared to 2005 levels.
2. Achieve 40% cumulative electric power capacity from non-fossil fuel sources by 2030.
3. Create additional carbon sink through forests and tree cover of 2.5 - 3 billion tonnes CO₂ equivalent.

Select the correct answer using the code given below.

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: India to release updated climate action plan ahead of COP30 meet in Brazil

- Under the Paris Agreement, every country is mandated to finalise and submit these NDCs every five years, with every successive NDC representing a progression over the existing one.

Nationally Determined Contributions (NDCs):

1. Definition:

- NDCs are **climate action plans** submitted by countries under the **Paris Agreement (2015)**, outlining **targets and measures** to reduce greenhouse gas (GHG) emissions.

2. Purpose:

- To **limit global temperature rise to well below 2°C**, ideally **1.5°C** above pre-industrial levels.
- To guide **domestic climate policies** and track **progress in emission reductions**.

3. Voluntary but Binding in Submission:

- Countries **voluntarily set their targets**, but **submission and updating of NDCs is mandatory** under the Paris Agreement.

4. Scope:

- Covers **mitigation measures** (reducing emissions), **adaptation measures** (climate resilience), **finance, technology transfer, and capacity building**.

5. India's NDCs:

- Reduce **emissions intensity of GDP by 33–35% by 2030** (compared to 2005 levels).
- Achieve **40% cumulative electric power capacity from non-fossil fuel sources by 2030**.
- **Create additional carbon sink through forests and tree cover of 2.5 - 3 billion tonnes CO₂ equivalent. Hence all the statements are correct.**

6. Reporting and Updates:

- Countries are expected to **update NDCs every 5 years**, reflecting **enhanced ambition** over time.

7. Global Significance:

- Serves as the **primary mechanism for countries to communicate climate commitments**.
- Supports **international transparency and accountability** in climate action.

8. Linkage with Sustainable Development Goals (SDGs):

- NDCs are linked with **SDG 7 (Affordable and Clean Energy)**, **SDG 13 (Climate Action)**, and **SDG 15 (Life on Land)**.

PYQ REFERENCE: (2016)

Q. The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of

- (a) pledges made by the European countries to rehabilitate refugees from the war-affected Middle East
- (b) plan of action outlined by the countries of the world to combat climate change**
- (c) capital contributed by the member countries in the establishment of Asian Infrastructure Investment Bank
- (d) plan of action outlined by the countries of the world regarding Sustainable Development Goals

Source: <https://indianexpress.com/article/india/india-updated-climate-action-plan-cop30-meet-brazil-10267831/>

75. Production Gap Report 2025 (PGR)

75. The objective of the Production Gap Report published by the United Nations Environment Programme (UNEP) is to

- (a) monitor global renewable energy capacity and investments.
- (b) assess the gap between planned fossil fuel production and climate-compatible levels to guide policy action.
- (c) track greenhouse gas emissions from the transportation sector only.
- (d) promote international trade of fossil fuels among developing countries.

Answer: (b) assess the gap between planned fossil fuel production and climate-compatible levels to guide policy action.

Explanation:

In NEWS: Production Gap Report: Global fossil fuel plans exceed Paris limits by 120% for 1.5°C

The Production Gap Report:

- The Production Gap Report is an annual assessment published by the **United Nations Environment Programme (UNEP)** and partner organizations.
- It analyzes the difference between countries' planned fossil fuel production and the levels consistent with limiting global warming to 1.5°C or 2°C above pre-industrial levels. **Hence option (b) is correct.**
- The report highlights the "production gap"—the gap between government plans for fossil fuel extraction and the reduction needed to meet international climate goals.

Key Findings of the 2025 Production Gap Report:

- **Planned Fossil Fuel Production in 2030:** Governments collectively plan higher levels of coal production through 2035, gas through 2050, and oil well beyond mid-century compared to projections made just two years ago.
- **Coal Production:** Projected to be 500% higher than the median 1.5°C pathway and 330% above the 2°C benchmark.
- **Oil and Gas Production:** Planned 2030 production exceeding Paris-aligned limits by 31% and 92%, respectively.
- **Major Contributing Countries:** China, the United States, Saudi Arabia, Brazil, and Nigeria are among the countries ramping up extraction.

Urgent Call for Action:

- **Immediate Reductions Needed:** To align with the Paris Agreement, coal use must be nearly phased out by 2040, while oil and gas production must fall by around 75% by 2050 compared to 2020 levels.
- **Current Trajectories:** Instead of reductions, fossil fuel output is projected to be more than 4.5 times higher than 1.5°C-consistent levels by 2050.

- **Just Transition:** Deliberate policies for a "just transition" are essential to cushion workers and communities dependent on fossil fuel industries.

PYQ REFERENCE: (2021)

Q. The 'Common Carbon Metric', supported by UNEP, had been developed for

- (a) **Assessing the carbon footprint of building operations around the world**
- (b) Enabling commercial farming entities around the world to enter carbon emission trading
- (c) Enabling governments to assess the overall carbon footprint caused by their countries
- (d) Assessing the overall carbon footprint caused by the use of fossil fuels by the world in a unit time

Source:

<https://www.downtoearth.org.in/energy/production-gap-report-global-fossil-fuel-plans-exceed-paris-limits-by-120-for-15c>

76. Dugong

76. With reference to 'dugong', a mammal found in India, which of the following statements is/are correct?

1. Dugong is a strictly marine mammal, occurring exclusively in coastal and marine waters, and absent in freshwater ecosystems.
2. In India, its distribution is primarily restricted to the Gulf of Mannar, Palk Bay, Gulf of Kachchh, and the Andaman & Nicobar Islands.
3. It is classified as Vulnerable under the IUCN Red List of Threatened Species.

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: IUCN formally adopted a motion recognising India's first Dugong Conservation Reserve in the Palk Bay spread over Thanjavur and Pudukkottai districts.

Dugong:

- Dugong (*Dugong dugon*) is a **marine herbivorous mammal**, also known as the "sea cow."
- Closely related to manatees but found only in **marine waters** (not freshwater). **Hence statement 1 is correct.**
- Feeds primarily on **seagrass meadows**, making it a keystone species for coastal ecosystems.

Distribution

- Found in **warm coastal waters** of the **Indian Ocean and western Pacific Ocean.**

- In India: concentrated in the **Gulf of Mannar, Palk Bay, Gulf of Kachchh**, and the **Andaman & Nicobar Islands**. **Hence statement 2 is correct.**

Conservation Status

- **IUCN Red List:** Vulnerable. **Hence statement 3 is correct.**
- **Wildlife (Protection) Act, 1972:** Schedule I (highest protection)
- **CITES:** Appendix I

Threats

- Loss and degradation of **seagrass habitats** due to coastal development, pollution, trawling.
- **Bycatch mortality** in gillnets and trawlers.
- **Boat collisions** and entanglement.
- **Poaching** for meat, oil, and body parts.
- Climate change affecting **seagrass ecosystems**.

Conservation Measures in India

- **Dugong Conservation Reserve** announced in **Palk Bay, Tamil Nadu (2022)**.
- Inclusion under the **“Dugong Recovery Program”** of the Ministry of Environment, Forest and Climate Change.
- Efforts for **seagrass restoration** and community participation in Gulf of Mannar & Andaman regions.
- Awareness programmes among coastal fishing communities.

PYQ REFERENCE: (2015)

Q. With reference to ‘dugong’, a mammal found in India, which of the following statements is/are correct?

1. It is a herbivorous marine animal.
2. It is found along the entire coast of India.
3. It is given legal protection under Schedule I of the Wildlife (Protection) Act; 1972.

Select the correct answer using the code given below.

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

Source: <https://www.thehindu.com/news/national/tamil-nadu/dugong-redux/article70101867.ece#~:text=IUCN%20recognition,over%20Thanjavur%20and%20Pudukkottai%20districts>

77. Cold Desert Biosphere Reserve

77. Consider the following biosphere reserves:

1. Cold Desert Biosphere Reserve
2. Seshachalam Biosphere Reserve
3. Dehang-Dibang Biosphere Reserve
4. Gulf of Mannar Biosphere Reserve
5. Achanakmar-Amarkantak Biosphere Reserve

How many of the above Biosphere Reserves are recognized by the UNESCO World Network of Biosphere Reserves under the MAB programme?

- (a) Only two
- (b) Only three

- (c) Only four
- (d) All the five

Answer: (b) Only three

Explanation:

In NEWS: Cold Desert named India’s 13th UNESCO biosphere reserve

Biosphere Reserves in India:

There are a total of 18 biosphere reserves in India, but only 13 are part of the UNESCO World Network of Biosphere Reserves under the MAB programme. Cold Desert becomes India’s 13th UNESCO Biosphere Reserve

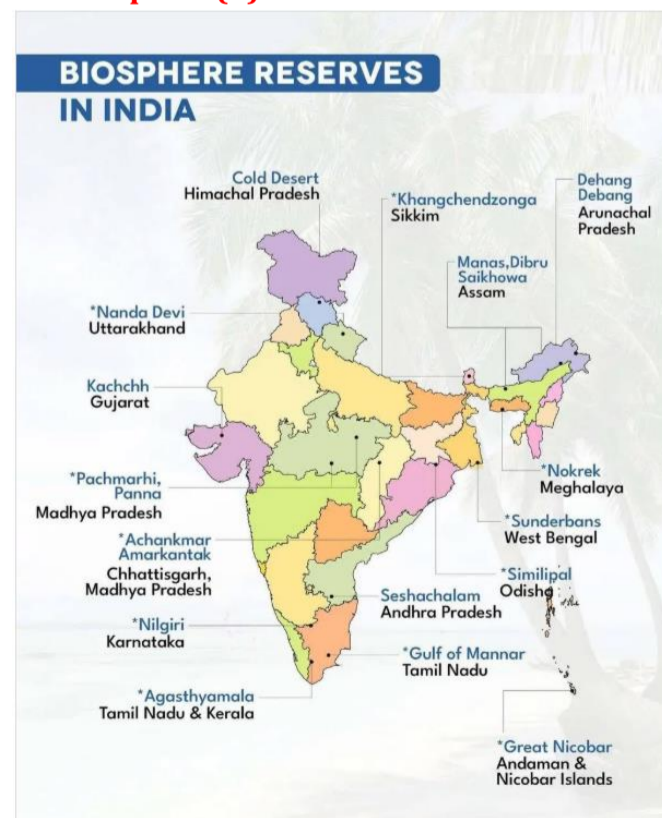
UNESCO World Network of Biosphere Reserves under the MAB programme:

1. Nilgiri Biosphere Reserve – Tamil Nadu, Kerala, Karnataka
2. Gulf of Mannar Biosphere Reserve – Tamil Nadu
3. Sundarbans Biosphere Reserve – West Bengal
4. Nanda Devi Biosphere Reserve – Uttarakhand
5. Nokrek Biosphere Reserve – Meghalaya
6. Pachmarhi Biosphere Reserve – Madhya Pradesh
7. Similipal Biosphere Reserve – Odisha
8. Great Nicobar Biosphere Reserve – Andaman & Nicobar Islands
9. Achanakmar-Amarkantak Biosphere Reserve – Chhattisgarh, Madhya Pradesh
10. Agasthyamalai Biosphere Reserve – Kerala, Tamil Nadu
11. Khangchendzonga National Park – Sikkim
12. Panna Biosphere Reserve – Madhya Pradesh
13. Cold Desert Biosphere Reserve – Himachal Pradesh, Jammu & Kashmir

Other Biosphere Reserves:

1. Seshachalam Biosphere Reserve – Andhra Pradesh
2. Kachchh Biosphere Reserve – Gujarat
3. Dihang-Dibang Biosphere Reserve – Arunachal Pradesh
4. Dibru Saikhowa Biosphere Reserve – Assam
5. Manas - Assam

Hence option (b) is correct.



PYQ REFERENCE: (2014)

Q. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of

- (a) biosphere reserves
- (b) botanical gardens
- (c) national parks
- (d) wildlife sanctuaries

Source:

https://www.downtoearth.org.in/environment/cold-desert-named-indias-13th-unesco-biosphere-reserve#google_vignette

78. Desert 'Soilification' Technology

78. Consider the following benefits of desert soilification:

1. Increased crop yield
2. Reduced irrigation requirement
3. Dependence on synthetic fertilizers
4. Restoration of barren lands

Which of the above are correct?

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

Answer: (d) 1, 2 and 4

Explanation:

In NEWS: New farming technology holds potential to stop desertification

Desert Soilification:

- Desert soilification involves the application of bioformulations and polymers to desert sand, transforming it into a soil-like medium suitable for agriculture.
- This process enhances soil fertility, water retention, and plant stress resistance, making it feasible to grow crops in arid environments.

How It Works

- **Polymer Application:** Polymers are applied to desert sand to bind sand particles together, creating a stable structure that mimics soil.
- **Bioformulation:** Indigenous microorganisms are introduced to the treated sand to promote nutrient cycling and improve soil health.
- **Water Retention:** The treated sand exhibits increased water-holding capacity, reducing the need for frequent irrigation. Hence statement
- **Stress Resistance:** Crops grown in soilified sand show enhanced tolerance to heat and arid conditions.

Applications and Benefits

- **Crop Cultivation:** Successful trials have been conducted with crops like wheat, bajra, guar gum, and chickpea.

- **Water Efficiency:** Soilified lands require fewer irrigation cycles compared to traditional farming methods. **Hence 2 is correct.**

- **High Yield:** For instance, wheat yields on solidified desert land have been recorded at a ratio of 1:20 (seed to harvest), which is twice the output of untreated desert land. **Hence 1 is correct.**

- **Low Input Cost:** The use of locally available bio-agents and simple application techniques makes the process cost-effective. Soilification could reduce dependence on synthetic fertilizers by improving natural soil fertility. **Hence 3 is incorrect.**

- **Eco-Restoration:** This method helps in converting barren deserts into cultivable farmland without the need for heavy machinery. **Hence 4 is correct.**

Global Significance

- **Desertification Control:** Soilification can play a crucial role in preventing the expansion of deserts, such as the Thar Desert, by restoring soil fertility.

- **Water Security:** In water-scarce regions, this technology minimizes groundwater use, which is critical in areas like Rajasthan.

- **Food Security:** Enabling the cultivation of staple crops in arid belts contributes to enhancing food security.



PYQ REFERENCE:

Q. What is/are the advantage/advantages of zero tillage in agriculture?

1. Sowing of wheat without burning the residue of previous crop.
2. Without the need for nursery of rice saplings, direct planting of paddy seeds in the wet soil is possible.
3. Carbon sequestration in the soil is possible

Select the correct answer using the code given below:

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

Source:

<https://www.thehindu.com/news/cities/Delhi/new-farming-technology-holds-potential-to-stop-desertification/article70099654.ece>

79. India's first port-based Green Hydrogen Pilot Project

79. Consider the following statements:

Statement-I: Tamil Nadu has India's first port-based Green Hydrogen project

Statement-II: The facility uses electricity from both renewable and non-renewable sources to power an electrolyzer, which splits water (H₂O) into hydrogen (H₂) and oxygen (O₂).

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Answer: (c) Statement-I is correct, but Statement-II is incorrect

Explanation:

In NEWS: Shri Sarbananda Sonowal Unveils Green Hydrogen Pilot Project at VOC Port in Tamil Nadu

India's First Port-Based Green Hydrogen Pilot Project:

● India's First Port-Based Green Hydrogen Pilot Project was inaugurated at **V.O. Chidambaranar (VOC) Port, Thoothukudi, Tamil Nadu. Hence statement I is correct.**

- It became the first port in India to produce green hydrogen → a milestone in India's clean energy and green shipping transition.
- It was launched on the 154th birth anniversary of V.O. Chidambaranar, linking Swadeshi shipping legacy with modern green transition.

Project Features:

- **Green Hydrogen Pilot Facility:** Powering streetlights and EV charging station in the port colony.
- **Green Methanol Bunkering & Refuelling Facility:** Aligned with proposed Coastal Green Shipping Corridor (Kandla-Tuticorin). Positions VOC Port as a green bunkering hub in South India.

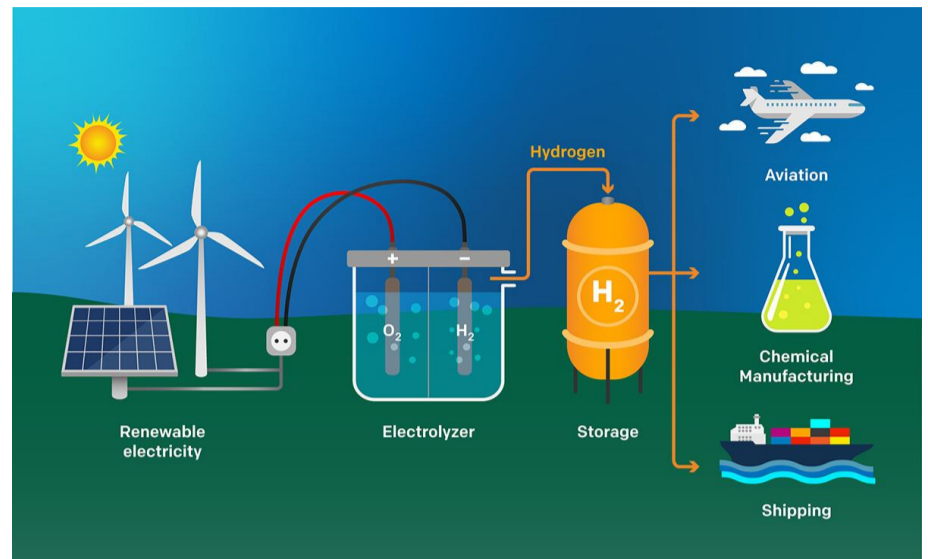
Strategic Importance:

- Boosts India's National Green Hydrogen Mission (2023).
- Supports IMO 2050 decarbonisation goals in shipping.
- Strengthens Tamil Nadu's role as a renewable and maritime hub.
- Fits into Sagarmala Programme → 98 projects in Tamil Nadu worth ₹93,715 crore (50 completed).
- By 2030 → India among Top 10 shipbuilding nations.
- By 2047 → Among Top 5 shipbuilding nations.

How Green Hydrogen is Produced:

- **Renewable Energy Power:** The process begins with renewable energy sources like solar or wind power.
- **Electrolysis:** This electricity powers an electrolyzer, which uses electrolysis to split water (H₂O) into hydrogen (H₂) and oxygen (O₂). **Hence statement II is incorrect.**

- **Clean Output:** The resulting hydrogen is "green" because its production process does not release greenhouse gases, making it a sustainable fuel source.



Sectors Benefiting from Green Hydrogen

- **Fertilizer Industry:** Green hydrogen can replace fossil fuels in fertilizer manufacturing, a significant step toward sustainable agriculture.
- **Oil Refineries and Steel Production:** It offers a viable path to decarbonize processes in these essential industries.
- **Long-Haul Transportation:** Green hydrogen can serve as a clean fuel for long-distance transport, an area where decarbonization is particularly challenging.

PYQ REFERENCE: (2022)

Q. Consider the following statements:

1. Gujarat has the largest solar park in India.
2. Kerala has a fully solar powered International Airport.
3. Goa has the largest floating solar photovoltaic project in India.

Which of the statements given above is/are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2164314>

ECONOMY

80. India Post Payments Bank

80. Which of the following services are offered by the India Post Payments Bank (IPPB), a fully owned enterprise of the Government of India?

1. Unified Payments Interface
2. Immediate Payment Service
3. National Electronic Funds Transfer
4. Real-time gross settlement
5. Bharat BillPay
6. Direct Benefit Transfer
7. RuPay credit Card

Select the correct answer using the code given below:

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

Answer: (c) 1, 2, 3, 4, 5 and 6 only

In NEWS: India Post Payments Bank Celebrates 8th Foundation Day (IPPB Day)

India Post Payments Bank (IPPB):

- Launched: September 1, 2018
- Parent Organization: Department of Posts, Ministry of Communications, Government of India
- Ownership: 100% Government of India
- Tagline/Motto: "Aapka Bank, Aapke Dwaar" (Your Bank at Your Doorstep)
- Headquarters: New Delhi

The bank also provides features like:

- Account: The bank offers savings and current accounts up to a balance of Rs. 200,000.
- QR Code: Customers can use QR code payments eliminating the need to remember account numbers, PINs and passwords.
- Unified Payments Interface
- Immediate Payment Service
- National Electronic Funds Transfer
- Real-time gross settlement
- Bharat BillPay
- Direct Benefit Transfer
- RuPay Debit Card
- AEPS (Aadhaar Enabled Payment Service)

Achievements:

- Over 12 crore customers onboarded.
- Operations through 1.64 lakh Post Offices and 1.90 lakh Postmen & Gramin Dak Sevaks (GDS).
- Delivered doorstep banking in rural and remote areas.
- Billions of digital transactions processed.

Technology-Enabled Delivery:

- Devices used by Postmen & GDS are CBS-integrated (Core Banking Solution)
- Banking done through biometric authentication, QR codes, and mobile apps
- Focus on secure, low-cost, and real-time services

Social & Economic Impact:

- Reduces urban-rural financial divide
- Empowers rural citizens and small savers
- Enhances role and relevance of India Post in digital governance
- Contributes to goals of Digital India and a less-cash economy

PYQ REFERENCE:

Q. 'The establishment of 'Payment Banks' is being allowed in India to promote financial inclusion. Which of the following statements is/are correct in this context?

1. Mobile telephone companies and supermarket chains that are owned and controlled by residents are eligible to be promoters of Payment Banks.
2. Payment Banks can issue both credit cards and debit cards.
3. Payment Banks cannot undertake lending activities.

Select the correct answer using the code given below

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2162639>

81. BHARATI initiative

81. The BHARATI initiative launched in 2025 is related to:

- (a) Promoting rural health infrastructure
- (b) Enhancing women's participation in agriculture
- (c) Empowering startups for agri-food exports through technology and incubation
- (d) Expanding irrigation facilities in semi-arid regions

Answer: (c) Empowering startups for agri-food exports through technology and incubation

Explanation:

In NEWS: APEDA launches BHARATI initiative to boost agri-food exports

BHARATI Initiative:

- Launch: APEDA launched BHARATI (Bharat's Hub for Agritech, Resilience, Advancement & Incubation for Export Enablement) on 2nd Sept 2025.
- Objective: To empower 100 agri-food and agri-tech startups from September 2025. **Hence option (c) is correct.**
- Export Goal: Supports India's target of achieving \$50 billion in agri-food exports by 2030.
- Focus Areas:
 - GI-tagged products
 - Organic and AYUSH-based foods
 - Value-added processed foods
 - Tech-driven solutions: AI for quality, Blockchain for traceability, IoT in cold chains, Agri-fintech innovations
- Implementation: Includes a 3-month acceleration cohort for startups.
- Collaboration: Will connect startups with industry bodies, agri-universities, IITs, NITs and global networks.
- Challenges Addressed: Perishability, logistics, packaging, compliance, and quality control in exports.
- Significance: Aims to blend innovation + incubation + technology for sustainable agri-export growth.

PYQ REFERENCE: (2016)

Q. 'SWAYAM', an initiative of the Government of India, aims at

- (a) promoting the Self Help Groups in rural areas
- (b) providing financial and technical assistance to young start-up entrepreneurs
- (c) promoting the education and health of adolescent girls
- (d) providing affordable and quality education to the citizens for free

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2163196>

82. NEXT-GEN GST REFORMS

82. Consider the following statements regarding the broader impact of GST rationalisation (Sept 2025):

1. Reduction in GST on household items and food products will increase disposable income and support demand-led growth.
2. Lowering GST on automobiles and auto parts will primarily benefit high-end luxury car manufacturers.
3. Zero GST on life-saving drugs reflects the government's focus on inclusive health care.

Which of the statements given above is/are correct?

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

Answer: (c) 1 and 3 only

Explanation:

In NEWS: Govt reduces GST on commonly used items; new rates to be effective from 22nd of this month

NEXT-GEN GST REFORMS:

● The **reduction in GST on household essentials and food products** such as soaps, shampoos, bicycles, and processed food items will **directly lower consumer expenditure**, thereby increasing **disposable income**. This in turn will stimulate **demand-led growth**, making **Statement 1 correct**.

● The decision to lower GST on the **automobile sector**—covering small cars, motorcycles up to 350 cc, buses, trucks, ambulances, three-wheelers, and all auto parts—primarily benefits the **mass segment and transport sector**, not luxury car manufacturers. Thus, **Statement 2 is incorrect** as it wrongly assumes the benefit goes to high-end vehicles.

● The **zero GST on 33 life-saving drugs and on certain medicines for cancer and rare diseases** highlights the government's commitment towards **affordable and inclusive healthcare**, making **Statement 3 correct**.

● Collectively, these reforms aim at easing the financial burden of households, supporting rural and urban consumers, boosting industry competitiveness, and aligning taxation with the vision of inclusive growth.

PYQ REFERENCE: (2018)

Q. What is/are the most likely advantages of implementing 'Goods and Services Tax (GST)'?

1. It will replace multiple taxes collected by multiple authorities and will thus create a single market in India.
2. It will drastically reduce the 'Current Account Deficit' of India and will enable it to increase its foreign exchange reserves.
3. It will enormously increase the growth and size of economy of India and will enable it to overtake China in the near future.

Select the correct answer using the code given below:

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

Source: <https://www.newsonair.gov.in/56th-meeting-of-gst-council-begins-in-national-capital-two-day-deliberations-to-focus-on-next-generation-reforms-including-tax-rates-rationalization/>

83. EU-INDIA FTA

83. With reference to the ongoing negotiations for the India-European Union Free Trade Agreement (FTA), consider the following statements:

1. The FTA aims to double trade between India and the EU and stabilise the global economy.
2. One of the key sticking points in EU-India trade talks has been tariffs on agricultural products and dairy.
3. The EU has already imposed sanctions on India for continuing trade with Russia.

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: Jaishankar pushes for EU-India FTA with visiting German FM

EU-INDIA FTA:

● The ongoing negotiations for the India-EU Free Trade Agreement (FTA) hold immense economic and geopolitical value. External Affairs Minister S. Jaishankar underlined that the FTA could double trade between India and the EU and stabilise the global economy—a point that makes **Statement 1 correct**.

● By acting as a "ballast" against global uncertainty, the FTA would help diversify supply chains, reduce dependence on China, and promote resilience in global trade.

● However, the path to conclusion faces challenges. A major sticking point lies in the EU's demand for greater market access in India's sensitive agricultural and dairy sectors. India has been cautious in this regard, given its large agrarian base and food security concerns. This confirms that **Statement 2 is correct**.

- At the same time, the negotiations are complicated by geopolitical tensions, particularly over Russia. The EU has imposed sanctions on Russia, especially targeting oil and gas imports, but it has not sanctioned India for continuing its energy trade with Russia. This makes **Statement 3 incorrect**.

- Thus, the India–EU FTA is not just a trade deal but a strategic partnership: balancing economic growth, food security, and geopolitical autonomy while reinforcing India’s role as a global economic stabiliser.

PYQ REFERENCE:

Q. Consider the following countries:

1. Australia
2. Canada
3. China
4. India
5. Japan
6. USA

Which of the above are among the 'free-trade partners' of ASEAN?

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

Source: <https://www.thehindu.com/news/national/hope-eu-india-fta-will-be-concluded-soon-jaishankar-after-meeting-german-counterpart/article70007725.ece>

84. Pulses Production In India

84. Consider the following statements:

1. India is the world’s largest producer, consumer, and importer of pulses.
2. Madhya Pradesh, Maharashtra and Rajasthan are the top pulse growing states in India
3. Nearly 80% of pulse production in India occurs through irrigated cultivation.

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: NITI Aayog recommends multiple strategies to enhance pulses production

Current Status and Achievements of Pulse Production In India:

- India is the world’s largest producer, consumer, and importer of pulses. **Hence statement 1 is correct.**
- Dependence on rain-fed areas: ~80% of pulse production. **Hence statement 3 is incorrect.**
- Supports over 5 crore farmers and families.

- 2015–16: Production at 16.35 million tonnes (MT); imports at 6 MT.

- 2022–23: Production rose to 26.06 MT (59.4% increase).

- Productivity increased by 38%.

- Import dependence fell from 29% to 10.4%.

- India grows 12 pulse crops across Kharif, Rabi, and Summer seasons.

- Top 3 States: Madhya Pradesh, Maharashtra, Rajasthan – 55% of output. **Hence statement 2 is correct.**

- Together, 10 states contribute over 91% of total pulse production.

Focus of the Report:

- Strengthening nutritional security and self-sufficiency (Atmanirbharta) in pulses.

- Advocates State-specific and district-specific agricultural strategies.

- Recognizes pulses as critical for:

- Food security
- Nutritional well-being
- Sustainable agriculture
- Environmental benefits

Major Recommendations of NITI Aayog:

- Area retention and diversification: Promote crop-wise clustering for efficiency.

- Tailored technologies: Use customised tools and methods suited to agro-ecological zones.

- Seed support: Focus on high-quality seed distribution and treatment kits.

- Cluster-based hubs: Promote “One Block–One Seed Village” initiative backed by Farmer Producer Organisations (FPOs).

Government Initiatives:

- **Mission for Atmanirbharta in Pulses (2025):** 6-year mission focusing on Arhar, Urad, and Masoor. Improve seed quality, yields, and reduce import dependency.

- **National Food Security Mission (NFSM) – Pulses:** Promotes area expansion and productivity. Provides seeds, technology kits, and support to farmers.

- **Price Support Scheme (PSS):** Ensures Minimum Support Price (MSP) procurement for pulses.

- **One Block–One Seed Village (2025 NITI Aayog recommendation):** Cluster approach to boost seed replacement and varietal adoption.

PYQ REFERENCE: (2020)

Q. With reference to pulse production in India, consider the following statements:

1. Black gram can be cultivated as both kharif and rabi crop.
2. Green-gram alone accounts for nearly half of pulse production.
3. In the last three decades, while the production of kharif pulses has increased, the production of rabi pulses has decreased.

Which of the statements given above is/are correct?

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

Source: <https://www.thehindu.com/news/national/niti-aayog-recommends-multiple-strategies-to-enhance-pulses-production/article70013235.ece>

85. Maternal Mortality Ratio

85. The Maternal Mortality Ratio in an economy is defined as:

- (a) the number of maternal deaths per 100,000 live births in a year
- (b) the number of children born and dead to a couple in their lifetime in a given population.
- (c) the birth rate minus death rate per 1000 women in reproductive age
- (d) the percentage of women receiving antenatal care during pregnancy

Answer: (a) the number of maternal deaths per 100,000 live births in a year

Explanation:

In NEWS: Kerala's maternal mortality ratio rises steeply from 18 to 30

Kerala's MMR Rises to 30:

- Kerala's MMR increased from 18 to 30 per 1,00,000 live births in the latest SRS bulletin (2021-23).
- Despite this increase, Kerala and Andhra Pradesh still lead as the States with the lowest MMR in India.
- The absolute number of maternal deaths has stayed steady (around 120-140 per year).
- However, live births have declined significantly in recent years (now below 4 lakh).
- This shrinking denominator naturally pushes the MMR upward, even if the health situation hasn't worsened.
- In 2021, Kerala saw 97 maternal deaths due to COVID-19, which contributed to a spike in MMR (to 51).

Maternal Mortality Ratio:

- MMR refers to the number of maternal deaths per 100,000 live births in a given time period (usually one year). **Hence option (a) is correct.**
- A maternal death is the death of a woman during pregnancy or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.
- It's a key indicator of maternal health, access to healthcare, and the effectiveness of a country's health system.
- A high MMR often reflects inadequate access to quality prenatal and delivery care.
- It is used by governments, WHO, and researchers to track progress toward health goals, like the Sustainable Development Goal (SDG) 3.1:
- India's target to reduce its Maternal Mortality Ratio (MMR) is to achieve fewer than 70 deaths per 100,000 live births by 2030, which aligns with the United Nations' Sustainable Development Goal (SDG 3).

Factors Affecting MMR:

- Quality of antenatal care
- Skilled birth attendance

- Emergency obstetric care
- Maternal age and health conditions
- Education and awareness
- Socioeconomic and cultural factors

PYQ REFERENCE: (2024)

Q. The total fertility rate in an economy is defined as :

- (a) the number of children born per 1000 People in the Population in a year.
- (b) the number of children born to couple in their lifetime in a given population.
- (c) the birth rate minus death rate.
- (d) the average number of live births a woman would have by the end of her child-bearing age.**

Source:

<https://www.thehindu.com/news/national/kerala/keralas-maternal-mortality-rate-up-from-18-to-30/article70025878.ece>

86. Foreign direct investment (FDI)

86. Consider the following:

1. Narrowing Current Account Deficit
2. Reduced Job Creation
3. High Capital formation
4. Increased Currency volatility
5. Balance of payments Crisis

How many of the above are the impacts of declining FDI in India?

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

Answer: (b) Only three

Explanation:

In NEWS: A complex turn in India's FDI story

Foreign Direct Investment (FDI):

● Foreign Direct Investment (FDI) refers to investments made by a foreign entity (individuals, companies, or governments) into businesses or production units in India with the intention of establishing a lasting interest or control.

● FDI inflows into India are regulated under the Foreign Exchange Management Act (FEMA), 1999, and overseen by the Reserve Bank of India (RBI) and Department for Promotion of Industry and Internal Trade (DPIIT).

FDI can come in the form of:

- Setting up new businesses (Greenfield investments)
- Acquiring existing businesses (Brownfield investments)
- Joint ventures
- Buying equity shares in Indian companies

Automatic Route

- No prior government approval is required.
- FDI is allowed up to a certain percentage in specific sectors (e.g., 100% in IT, 74% in telecom).

- Just needs to be reported to RBI post-investment.
- **Examples:** IT services, Manufacturing, Ecommerce (marketplace model)

Government Route

- Prior approval required from the concerned ministry/department.
- Used for sensitive or strategic sectors.
- **Examples:** Defense, Media, Satellites, Sectors where investments come from countries sharing land borders with India (especially China)

Current Trends of FDI in India:

- Investments are now focused more on short-term gains (e.g., tax arbitrage) than long-term industrial development.
- Manufacturing, once a top FDI destination, now accounts for just 12% of total inflows.
- Sectoral Distribution:
 - Gaining FDI: Services, finance, energy distribution, hospitality (mostly rent-seeking sectors)
 - Losing FDI: Manufacturing, tech, infrastructure
- Sources of FDI (Top Countries): Singapore, Mauritius, USA, Netherlands and Japan

Why the Decline in Net FDI?

- High Disinvestments
- Post-pandemic instabilities
- Foreign investors pulled out \$153.9 billion between FY 2021–25.
- Indian Firms Investing Abroad driven by regulatory hurdles, infrastructure gaps and unstable policies

Impacts of Declining FDI in India

- Reduced capital availability for infrastructure, manufacturing, and innovation-led sectors. **Hence 3 is incorrect.**
- Slower job creation, especially in labor-intensive industries like manufacturing and services. **Hence 2 is correct.**
- Lower technology transfer, hindering modernization and productivity improvements.
- Weakening of industrial growth, as FDI is often a driver of sectoral expansion.
- Reduced integration with global value chains, limiting export competitiveness.
- Widening Current Account Deficit (CAD, a fall in FDI increases pressure on India's external accounts. **Hence 1 is incorrect.**
- Pressure on the balance of payments, making India more vulnerable to external shocks. **Hence 5 is correct.**
- Increased currency volatility, as lower FDI inflows reduce foreign exchange reserves. **Hence 4 is correct.**
- Loss of investor confidence, discouraging both foreign and domestic long-term investments.
- Higher reliance on short-term capital flows, which are more volatile and risky.
- Stunted development of strategic sectors (e.g., clean energy, advanced tech) due to lack of patient capital.
- Slower progress towards becoming a global manufacturing hub under initiatives like "Make in India".
- Reduced government revenue from associated taxes and duties on foreign investments.

PYQ REFERENCE: (2011)

Q. Both Foreign Direct Investment (FDI) and Foreign Institutional Investor (FII) are related to investment in a country. Which one of the following statements best represents an important difference between the two?

- (a) FII helps bring better management skills and technology, while FDI only brings in capital
- (b) FII helps in increasing capital availability in general, while FDI only targets specific sectors**
- (c) FDI flows only into the secondary market, while FII targets primary market.
- (d) FII is considered to be more stable than FDI

Source: <https://www.thehindu.com/opinion/op-ed/a-complex-turn-in-indias-fdi-story/article70022990.ece>

87. Multidimensional Poverty Index (MPI)

87. Consider the following statements with respect to the National Multidimensional Poverty Index(MPI) in India:

1. NITI Aayog is the official nodal agency for implementing and institutionalizing the MPI in India.
2. MPI value is arrived at by multiplying the headcount ratio and the intensity of poverty.
3. Bank account and maternal health are the two indicators included in the National MPI, in addition to the indicators of the Global MPI.

How many of the above statements are correct?

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

Answer: (c) All three

Explanation:

In NEWS: NITI Aayog in collaboration with UNDP organised a National Workshop on 'The National Multidimensional Poverty Index (MPI)

National Multidimensional Poverty Index (MPI):

- The National Multidimensional Poverty Index (MPI) in India is a collaborative effort spearheaded by NITI Aayog, with technical development and support provided by UNDP and OPHI (Oxford Poverty and Human Development Initiative).
- NITI Aayog is the official nodal agency for implementing and institutionalizing the MPI in India. **Hence statement 1 is correct.**
- India's National MPI (by NITI Aayog) is aligned with the global MPI methodology but customized to reflect national priorities (e.g., adding indicators like bank account access, maternal health). **Hence statement 3 is correct.**

The indices of the national MPI comprise:

- **i) Headcount ratio (H): How many are poor?**
 - Proportion of multidimensionally poor in the population, which is arrived at by dividing number of multidimensionally poor persons by total population.
- **ii) Intensity of poverty (A): How poor are the poor?**

- Average proportion of deprivations which is experienced by multidimensionally poor individuals.
- To compute intensity, the weighted deprivation scores of all poor people are summed and then divided by the total number of poor people.
- MPI value is arrived at by multiplying the headcount ratio (H) and the intensity of poverty (A), reflecting both the share of people in poverty and the degree to which they are deprived.
- **MPI = H x A. Hence statement 2 is correct.**

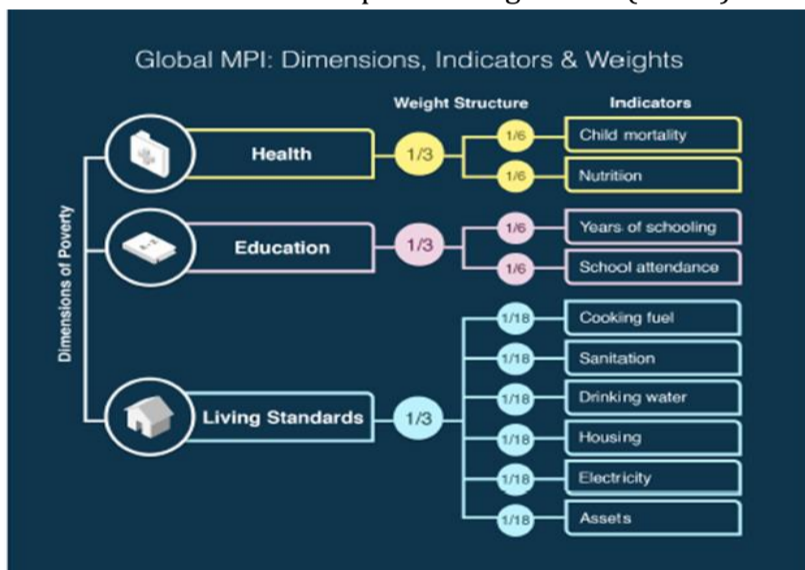
Indicators of National Multidimensional Poverty Index:

Table 1: Indicators in India's National MPI

Dimension	Indicator	A Household is Considered Deprived if	Weight (W)
Health (1/3)	Nutrition	Any child between the ages of 0 to 59 months, or woman between the ages of 15 to 49 years, or man between the ages of 15 to 54 years -for whom nutritional information is available - is found to be undernourished.	1/6
	Child-Adolescent Mortality	A child/adolescent under 18 years of age has died in the family in the five-year period preceding the survey.	1/12
	Maternal Health	Any woman in the household who has given birth in the 5 years preceding the survey, has not received at least 4 antenatal care visits for the most recent birth or has not received assistance from trained skilled medical personnel during the most recent childbirth.	1/12
Education (1/3)	Years of Schooling	Not even one member of the household aged 10 years or older has completed six years of schooling.	1/6
	School Attendance	Any school-aged child is not attending school up to the age at which he/she would complete class 8.	1/6
Standard of Living (1/3)	Cooking Fuel	A household cooks with dung, agricultural crops, shrubs, wood, charcoal or coal.	1/21
	Sanitation	The household has unimproved or no sanitation facility or it is improved but shared with other households.	1/21
	Drinking Water	The household does not have access to improved drinking water or safe drinking water is at least a 30-minute walk from home (as a round trip).	1/21
	Electricity	The household has no electricity.	1/21
	Housing	The household has inadequate housing: the floor is made of natural materials, or the roof or wall are made of rudimentary materials.	1/21
	Assets	The household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike, or refrigerator, and does not own a car or truck.	1/21
	Bank Account	No household member has a bank account or a post office account.	1/21

Indicators of Global Multidimensional Poverty Index:

The Global Multidimensional Poverty Index (Global MPI) is developed and maintained by Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP).



PYQ REFERENCE: (2012)

Q. The Multi-dimensional Poverty Index developed by Oxford Poverty and Human Development Initiative with UNDP support covers which of the following?

1. Deprivation of education, health, assets and services at household level
2. Purchasing power parity at national level
3. Extent of budget deficit and GDP growth rate at national level

Select the correct answer using the codes given below:

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2165241>

88. Currency & Exchange Rate

88. Which of the following are likely to cause the Indian Rupee to depreciate against the US Dollar?

1. Increase in global crude oil prices.
2. Large inflow of Foreign Portfolio Investment (FPI).
3. US Federal Reserve increasing its policy interest rates.
4. India's Current Account Deficit widening.

Select the correct answer using the code below:

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

Answer: (a) 1, 3 and 4 only

Explanation:

In NEWS: Rupee recovers from record low to close 4 paise higher at 88.11 against U.S. dollar

Currency & Exchange Rate Basics

- **Exchange Rate:** Price of one currency in terms of another (₹ per US\$).
- **Depreciation:** Fall in value of domestic currency against foreign (₹ goes from 82 → 88 per US\$).
- **Appreciation:** Rise in domestic currency value (₹ goes from 88 → 82 per US\$).
- **Nominal vs Real Exchange Rate:**
 - *Nominal* = market rate.
 - *Real* = adjusted for inflation differentials.

Factors Affecting Rupee Movement

1. Global factors:

- **US Federal Reserve interest rate hikes** attract capital to US, leading to FPI/FII outflows from India.
- **Strengthening of the Dollar Index:** global investors move to "safe haven" dollar.
- **Rise in crude oil prices:** higher import bill for India (major oil importer).
- **Global financial crises or recession fears:** investors pull out funds from emerging markets.
- **Geopolitical tensions** (wars, sanctions, trade conflicts): weaken emerging market currencies.

2. Domestic factors:

- **Widening Current Account Deficit (CAD):** more imports than exports → higher demand for dollars.
- **High inflation in India:** reduces investor confidence, weakens rupee.
- **Low GDP growth prospects:** reduces attractiveness of India for investors.
- **Outflow of Foreign Portfolio Investment (FPI):** investors sell rupees and buy dollars. **Hence statement 2 is incorrect.**
- **Increase in gold imports and essential imports:** more dollar demand.

Role of RBI

- RBI does **not target a fixed exchange rate**. It follows a managed **float system**.
- Intervenes to prevent **excessive volatility** (by selling \$ when rupee weakens too much, buying \$ when rupee strengthens).
- Maintains **Forex Reserves (~\$600 bn)** for this purpose.

PYQ REFERENCE: (2022)

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

1. If the inflation is too high, Reserve Bank of India (RBI) is likely to buy government securities.
2. If the rupee is rapidly depreciating, RBI is likely to sell dollars in the market.
3. If interest rates in the USA or European Union were to fall, that is likely to induce RBI to buy dollars.

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

Source:

<https://www.thehindu.com/business/markets/rupee-reCOVERS-from-record-low-to-close-4-paise-higher-at-8811-against-us-dollar/article70033350.ece>

89. Equity mutual fund (MF)

89. With reference to Equity Mutual Funds (MFs), consider the following statements:

1. As per SEBI regulations, they must invest at least 65% of their assets in equities and equity-related instruments.
2. They are considered suitable for short-term investment horizons of less than one year.
3. The returns from equity mutual funds are completely tax-free in India.

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

Answer: (a) 1 only

Explanation:

In NEWS:

Equity Mutual Funds (MFs):

1. **Definition** – An equity mutual fund is a mutual fund that invests **mostly in company shares (equities)**.
2. **SEBI Rule** – At least **65% of total assets** must be invested in equities/equity-related instruments. **Hence statement 1 is correct.**
3. **Objective** – Provide **long-term capital growth** through stock market investments. **Hence statement 2 is incorrect.**
4. **Types by Market Cap** –

- **Large-cap funds** (stable, blue-chip companies)
- **Mid-cap funds** (medium-sized companies, moderate risk/return)
- **Small-cap funds** (high-growth, high-risk companies)
- **Multi-cap / Flexi-cap funds** (mix of large, mid, and small caps)

5. Types by Strategy –

- **Sectoral/Thematic funds** (IT, Pharma, Infrastructure, etc.)
- **Value/Growth funds** (based on stock valuation styles)
- **Focused funds** (limited number of companies)

6. **Risk-Return Profile** – Higher **risk and volatility** compared to debt funds, but with potential for **higher long-term returns**.

7. **Time Horizon** – Best suited for **long-term investors** (5+ years).

8. Taxation –

- **Short-Term Capital Gains (STCG)**: If redeemed within 1 year → taxed at 15%.
- **Long-Term Capital Gains (LTCG)**: If redeemed after 1 year → gains above ₹1 lakh taxed at 10% (without indexation). **Hence statement 3 is incorrect.**

PYQ REFERENCE: (2022)

Q. With reference to Convertible Bonds, consider the following statements:

1. As there is an option to exchange the bond for equity, Convertible Bonds pay a lower rate of interest.
2. The option to convert to equity affords the bondholder a degree of indexation to rising consumer prices.

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

Source: [https://www.thehindu.com/business/equity-mf-inflows-drop-22-mom-in-august-to-33430-crore-amfi-data/article70034836.ece#:~:text=Equity%20mutual%20of und%20\(MF\)%20inflows,India%20\(AMFI\)%20on%20Wednesday.](https://www.thehindu.com/business/equity-mf-inflows-drop-22-mom-in-august-to-33430-crore-amfi-data/article70034836.ece#:~:text=Equity%20mutual%20of und%20(MF)%20inflows,India%20(AMFI)%20on%20Wednesday.)

90. Foreign Capital Paradox

90. Which one of the following situations best reflects the "Foreign Capital Paradox" often talked about in the media recently with reference to India?

- (a) India's GDP growth is high but foreign capital inflows such as FDI and FPI remain subdued.
- (b) India's GDP growth declines sharply, while foreign capital inflows increase significantly.
- (c) India receives higher foreign remittances from abroad, but foreign portfolio investments show negative growth.
- (d) India's trade deficit narrows, but foreign direct investment inflows decline steadily.

Answer: (a) India's GDP growth is high but foreign capital inflows such as FDI and FPI remain subdued.

Explanation:

In NEWS: Why foreign investors are not bullish on India

Foreign Capital Paradox

● The Foreign Capital Paradox describes the contrast wherein India's economy is growing rapidly (7-8% GDP growth), but foreign capital inflows such as FDI and FPI remain subdued or even declining. Normally, faster growth should attract more foreign investment, making the trend paradoxical. **Hence option (a) is correct.**

Current Context

- In 2024-25, net capital flows were just \$18.3 billion — the lowest since the global financial crisis of 2008-09.
- Earlier, in 2007-08, inflows touched \$107.9 billion.
- Even in April-June 2025, inflows fell by over 40% year-on-year, despite GDP growth at 7.8%.

Causes of the Paradox

Shift in Investor Behaviour

● Private equity & venture capital investors in e-commerce, healthcare, and green energy are now "cashing out" via IPOs or sales, instead of reinvesting.

Weak Portfolio Flows

● FPIs remain cautious due to global interest rate hikes, valuation concerns, and corporate earnings risks.

Trade & Geopolitical Uncertainty

● Rising trade barriers, tariff threats (e.g., by the US), and geopolitical tensions dampen investor confidence.

Domestic Factors

● Issues of regulatory uncertainty, complex taxation, and delays in project clearances also add to hesitancy.

Implications

- Balance of Payments (BoP): Large merchandise trade deficits require capital inflows; weak inflows can stress BoP.
- Forex Reserves: Sustained low inflows may reduce reserve buffers.
- Rupee Stability: Pressure on the rupee if current account deficits widen without matching capital inflows.
- Investment Climate: Signals risk perception despite high growth, which can deter long-term foreign investors.

Way Forward / Policy Suggestions

- Strengthen Ease of Doing Business → streamline approvals, improve contract enforcement.
- FDI Policy Reforms → open more sectors, ensure stable regulations.
- Deepen Domestic Capital Markets → reduce dependence on volatile foreign portfolio flows.
- Promote Innovation & Manufacturing (PLI, Make in India, Start-up India) → attract greenfield investments.
- Geopolitical Stability & Trade Diplomacy → build investor confidence through predictable trade policies.

PYQ REFERENCE: (2022)

Q. Which one of the following situations best reflects "Indirect Transfers" often talked about in the media recently with reference to India?

- (a) An Indian company investing in a foreign enterprise and paying taxes to the foreign country on the profits arising out of its investment.
- (b) A foreign company investing in India and paying taxes to the country of its base on the profits arising out of its investment.
- (c) An Indian company purchases tangible assets in a foreign country and sells such assets after their value increases and transfers the proceeds to India.
- (d) A foreign company transfers shares and such shares derive their substantial value from assets located in India.**

Source:

<https://indianexpress.com/article/explained/explained-economics/why-foreign-investors-are-not-bullish-on-india-10236408/>

91. World Bank – Milken Institute Program

91. The World Bank–Milken Institute Program primarily focuses on

- (a) Poverty alleviation through social safety nets.
- (b) Development of domestic capital markets in emerging economies.
- (c) Sustainable agriculture and climate financing.
- (d) Trade liberalisation and tariff reforms.

Answer: (b) Development of domestic capital markets in emerging economies.

Explanation:

In NEWS: EPFO Officer Selected for Prestigious World Bank – Milken Institute Program

World Bank – Milken Institute Program

- Launched in 2016 as a joint initiative of the World Bank Group and the Milken Institute (a US-based non-profit think tank).
- Focus: **Capital market development** in emerging and developing economies. **Hence option (b) is correct.**

Objectives

1. To **strengthen financial systems** in developing countries.
2. To help governments design and implement **domestic capital market reforms**.
3. To **mobilize long-term finance** for infrastructure, SMEs, and social sectors.
4. To build **local capacity** through training programs and technical assistance.

Key Features

- **Executive Education Program:**
 - Trains senior policymakers, regulators, and market participants.
 - Delivered in Washington D.C. and Los Angeles.
- **Focus Areas:**
 - Corporate bond markets.
 - Pension funds and insurance sector development.

- SME financing and innovation.
- Market regulations and governance.
- **Knowledge Exchange:** Sharing best practices between advanced and developing economies.
- **Goal:** Create **resilient, inclusive, and diversified financial markets.**

PYQ REFERENCE: (2016)

Q. India's ranking in the 'Ease of Doing Business Index' is sometimes seen in the news. Which of the following has declared that ranking?

- (a) Organization for Economic Cooperation and Development (OECD)
- (b) World Economic Forum
- (c) World Bank**
- (d) World Trade Organization (WTO)

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2166873>

92. Pink Tax

92. Which one of the following best describes the concept of 'Pink Tax'?

- (a) A government-imposed tax on all products marketed towards women to promote gender equity.
- (b) A luxury tax applied to imported cosmetics and personal care products regardless of gender.
- (c) The extra amount women are often charged for certain products or services that are marketed specifically to them, despite being similar or identical to men's versions.
- (d) A discount provided on feminine hygiene products to reduce the financial burden on women.

Answer: (c) The extra amount women are often charged for certain products or services that are marketed specifically to them, despite being similar or identical to men's versions.

Explanation:

In NEWS: Stop paying more for being a woman: avoid Pink Tax

Pink Tax:

- The Pink Tax is not an actual tax imposed by the government. Rather, it is a form of gender-based price discrimination where women are charged more than men for similar or identical products and services — simply because those items are marketed toward women. **Hence option (c) is correct.**
- The Pink Tax is a subtle, yet widespread form of market-driven gender inequality, where being a woman can cost more — not in taxes, but in everyday purchases.
- Awareness, comparison, and smarter choices can help avoid it, and contribute to economic fairness.
- Over a lifetime, women may spend thousands of rupees more on basic essentials than men.
- This financial burden is compounded by the gender wage gap and affects household savings, especially where women are not earning.

Examples:

- **Haircuts:** Women's haircuts often cost more than men's, even when the length and time taken are similar.
- **Pink toys:** Toys marketed to girls are often priced higher than similar toys for boys.
- **Personal care:** Products like razors, shampoos, deodorants, body lotions, and skincare are costlier for women — despite being functionally the same.

Pink Tax in India:

- **Awareness is low:** As per IFSA, 67% of Indians have never heard of the Pink Tax.
- **A major step:** In 2018, the Indian government removed GST on sanitary napkins and tampons, which previously had 12% tax — a small but important win against gender-based pricing.
- **NCDRC Ruling:** India's top consumer forum ruled that fair pricing must be followed, discouraging gender-based price differences.

PYQ REFERENCE: (2016)

Q. The term 'Base Erosion and Profit Shifting' is sometimes seen in the news in the context of

- (a) mining operation by multinational companies in resource-rich but backward areas
- (b) curbing of the tax evasion by multinational companies**
- (c) exploitation of genetic resources of a country by multinational companies
- (d) lack of consideration of environmental planning and developmental costs in the implementation of projects

Source:

<https://www.thehindu.com/business/Economy/stop-paying-more-for-being-a-woman-avoid-pink-tax/article70048296.ece#:~:text=What%20is%20Pink%20Tax%3F,service%20tailor%2Dmade%20for%20them.>

93. Finance Commission Grants

93. With reference to Finance Commission Grants, consider the following statements:

1. Finance Commission Grants are released from the Consolidated Fund of India.
2. The Finance Commission has the power to decide the final allocation of these grants.
3. Finance Commissions can also recommend Sector-specific and Performance-based Grants.

Which of the statements given above is/are correct?

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

Answer: (b) 1 and 3 only

Explanation:

In NEWS: Center Releases Over ₹342 Crores XV Finance Commission Grants for Rural Local Bodies in Tamil Nadu & Assam

Finance Commission Grants:

- The Finance Commission is a constitutional body established under Article 280 of the Indian Constitution.
- Finance Commission grants are provided under **Article 275** of the Constitution.
- They are released from the **Consolidated Fund of India**. **Hence statement 1 is correct.**
- These grants are recommended by the **Finance Commission** but the **Union Government decides final allocation**. **Hence statement 2 is incorrect.**
- **Revenue Deficit Grants** are given to States facing post-devolution revenue shortfalls.
- **Grants to Local Bodies** (Rural & Urban) are recommended since the **10th Finance Commission**, strengthened after the **73rd & 74th Amendments**.
- Local body grants are of two types – **Tied Grants** (for specific services like water & sanitation) and **Untied Grants** (for local priorities except salaries/establishment).
- **Grants for Disaster Management** are allocated to the **State Disaster Response Fund (SDRF)**.
- Finance Commissions can also recommend **Sector-specific and Performance-based Grants** (e.g., power reforms, agriculture, ease of doing business). **Hence statement 3 is correct.**
- Grants are generally released in **two installments per year**.
- Release of local body grants is conditional on **State Finance Commissions** being set up and proper **auditing of accounts**.

PYQ REFERENCE: (2025)

Q. Which of the following statements with regard to recommendations of the 15th Finance Commission of India are correct?

- It has recommended grants of Rs 4,800 crores from the year 2022-23 to the year 2025-26 for incentivizing States to enhance educational outcomes.
- 45 % of the net proceeds of Union taxes are to be shared with States.
- 45,000 crores are to be kept as performance-based incentive for all States for carrying out agricultural reforms.
- It reintroduced tax effort criteria to reward fiscal performance.

Select the correct answer using the code given below.

- I, II and III
- I, II and IV
- I, III and IV**
- II, III and IV

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2167452>

94. Impact of Inflation on GDP

94. Consider the following statements:

Statement I: When inflation is low, nominal GDP growth slows down and tax revenue collections rise at a slower pace.

Statement II: Nominal GDP is the total market value of a country's final goods and services produced within a specific

period, calculated using current prices without adjusting for inflation or deflation.

Which one of the following is correct in respect of the above statements?

- Both Statement I and Statement II are correct and Statement II explains Statement I
- Both Statement I and Statement II are correct but Statement II does not explain Statement I
- Statement I is correct Statement II is not correct but
- Statement I is not correct but Statement II is correct

Answer: (a) Both Statement I and Statement II are correct and Statement II explains Statement I

Explanation:

In NEWS: Why low inflation is a problem for government's finances

Low Inflation & Government Budget Targets

● **Nominal GDP is the sum of Real GDP and Inflation (price rise)**. It represents the value of goods and services produced in the economy at current prices. **Hence statement 2 is correct and explains statement 1.**

● **Government finances depend on the growth of nominal GDP**, since tax collections and fiscal calculations are made in money terms and not in terms of physical output.

● **In August 2025**, inflation indicators were very low:

- Consumer Price Index (CPI) inflation stood at **around 2.07%**.
- Wholesale Price Index (WPI) inflation was even lower, at **around 0.52%**.

Low Inflation is a Problem due to the following reasons:

Revenue Shortfall:

● When inflation is low, nominal GDP growth slows down. As a result, tax revenue collections rise at a slower pace. For example, between April and July 2025, **gross tax revenue increased by only about 1% year-on-year, while net tax revenue actually declined by nearly 7.5%**. **Hence statement 1 is correct.**

Fiscal Deficit and Debt Ratios:

● In the Union Budget for 2025-26, the government projected nominal GDP growth of **about 10.1%**. If nominal GDP turns out to be lower due to subdued inflation, the fiscal deficit-to-GDP ratio and debt-to-GDP ratio automatically worsen, even if the expenditure remains the same. The fiscal deficit target for 2025-26 is set at **4.4% of GDP**.

Base Effect:

● The upward revision in the GDP estimate for 2024-25 makes the nominal growth target for 2025-26 somewhat easier to achieve in absolute terms. However, the weakness in inflation still reduces the pace of expansion in nominal GDP.

When is Low Inflation Good vs. Bad

● **Low inflation can be beneficial when it arises from productivity gains, improved supply-side efficiency, or a bumper agricultural harvest**. In such cases, the economy enjoys both stable prices and higher real output.

● **Low inflation can be harmful when it reflects weak demand, sluggish private investment, or corporate**

reluctance to undertake capital expenditure. In such scenarios, low price growth indicates economic slackness rather than efficiency.

PYQ REFERENCE: (2015)

Q. A decrease in tax to GDP ratio of a country indicates which of the following?

1. Slowing economic growth rate
2. Less equitable distribution of national income

Select the correct answer using the code given below.

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

Source:

<https://indianexpress.com/article/explained/explained-economics/low-inflation-problem-government-budget-targets-10256765/>

95. Global Innovation Index

95. India's ranking in the 'Global Innovation Index' is sometimes seen in the news. Which of the following has declared that ranking?

- (a) World Economic Forum
(b) World Intellectual Property Organization
(c) Global Innovation Policy Center
(d) World Trade Organization

Answer: (b) World Intellectual Property Organization

Explanation:

In NEWS: India will be among top 10 countries on Global Innovation Index in next 3 years: Amit Shah

Global Innovation Index (GII):

● It is developed by World Intellectual Property Organization (WIPO) in collaboration with Cornell University and INSEAD.

Hence option (b) is correct.

● The Index ranks countries based on their innovation capabilities and performance, helping policymakers and businesses track progress and make informed decisions.

The GII uses 80+ indicators across 7 pillars:

Innovation Inputs:

- Institutions – Political stability, government effectiveness, regulatory quality
- Human capital & research – Education, R&D investments
- Infrastructure – ICT, energy, transport
- Market sophistication – Credit, investment, trade
- Business sophistication – Knowledge workers, R&D linkages

Innovation Outputs:

- Knowledge & technology outputs – Patents, high-tech exports
- Creative outputs – Trademarks, designs, media content

India's Performance:

- Rank in 2015: 91

- Rank in 2025: 38 (as per Amit Shah's statement)

- Target: Top 10 in 3 years

- India leads among lower-middle-income economies and is a global leader in ICT services exports, startups, and R&D in select sectors.

PYQ REFERENCE: (2016)

Q. India's ranking in the 'Ease of Doing Business Index' is sometimes seen in the news. Which of the following has declared that ranking?

- (a) Organization for Economic Cooperation and Development (OECD)
(b) World Economic Forum
(c) **World Bank**
(d) World Trade Organization (WTO)

Source: <https://www.thehindu.com/business/india-will-be-among-top-10-countries-on-global-innovation-index-in-next-3-years-amit-shah/article70084509.ece>

<https://www.wipo.int/gii-ranking/en/>

96. Liquidity Trap

96. A situation in which monetary policy becomes ineffective because interest rates are already very low (near zero), and people prefer to hold cash rather than invest in bonds or other assets. This economic phenomenon is called as

- (a) Stagflation
(b) Liquidity trap
(c) Hyperinflation
(d) Recession

Answer: (b) Liquidity trap

Explanation:

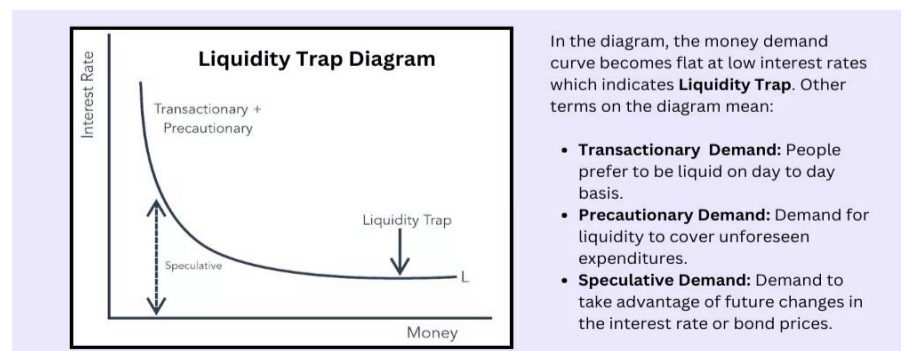
In NEWS: Recent economic trends in India indicate the presence of a liquidity trap.

● Despite the Reserve Bank of India (RBI) lowering interest rates by 100 basis points since February 2025, credit growth remains modest and demand for borrowing is subdued.

Concept of Liquidity Trap

● A situation in which monetary policy becomes ineffective because interest rates are already very low (near zero), and people prefer to hold cash rather than invest in bonds or other assets. **Hence option (b) is correct.**

● This was seen during the Covid-19 pandemic and is now evident in India. Lowering interest rates alone fails to boost economic activity when businesses face weak demand and excess capacity.



Origin: Concept introduced by **John Maynard Keynes** during the **Great Depression (1930s)**.

Key Features:

1. **Low/Zero Interest Rates** – Cutting rates further does not stimulate borrowing.
2. **High Liquidity Preference** – People hoard money instead of investing or consuming.
3. **Ineffective Monetary Policy** – Traditional tools of RBI/central bank fail to revive demand.
4. **Weak Credit Growth** – Even if banks have funds, businesses and households don't borrow.

Causes:

- Expectations of deflation or economic slowdown.
- Loss of confidence in financial markets.
- High savings despite low returns.
- Structural issues in the economy (low demand, high inequality).

Implications:

- Stagnant growth and unemployment.
- Inflation remains low or turns negative (deflation).
- Risk of prolonged economic depression.

Policy Responses:

1. **Fiscal Policy:** Higher government spending and targeted stimulus.
2. **Unconventional Monetary Policy:** Quantitative easing, negative interest rates, forward guidance.
3. **Structural Reforms:** Boosting consumption, investment, and employment.

Example:

- Great Depression (1930s, USA).
- Japan's "Lost Decade" (1990s–2000s).

PYQ REFERENCE: (2021)

Q. The money multiplier in an economy increases with which one of the following?

- (a) Increase in the Cash Reserve Ratio in the banks
- (b) Increase in the Statutory Liquidity Ratio in the banks
- (c) Increase in the banking habit of the people**
- (d) Increase in the population of the country

Source: <https://www.gktoday.in/liquidity-trap-and-its-impact-on-indian-economy/>

INTERNATIONAL RELATIONS

97. India - China Relation

97. Consider the following groupings:

1. BRICS
2. SAARC
3. BIMSTEC
4. SCO
5. ASEAN

In how many of the above groupings are both India and China members?

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

Answer: (a) Only two

In NEWS: India, China committed to cooperation, fair resolution of boundary issues, says Modi after meeting Xi

Historical Background

- India recognized the People's Republic of China in 1949.
- The Panchsheel Agreement (1954) emphasized peaceful coexistence.
- The 1962 India–China War created long-term mistrust.
- Diplomatic relations normalized from 1976 onwards.

Key Issues

- The boundary dispute covers Aksai Chin (Ladakh) and Arunachal Pradesh (South Tibet).
- The Line of Actual Control (LAC) is not clearly demarcated.
- Recurrent border standoffs: Sumdorong Chu (1987), Doklam (2017), Galwan (2020).
- China's close ties with Pakistan (CPEC through PoK) affect India's security.
- Chinese presence in the Indian Ocean (String of Pearls strategy) raises concerns.

Economic Relations

- China is India's largest trading partner in goods.
- The trade deficit heavily favors China.
- India depends on China for electronics, APIs, and telecom equipment.
- India banned Chinese apps and tightened FDI norms post-Galwan clash.

Geopolitical Dimensions

- India did not join China's Belt and Road Initiative (BRI) due to sovereignty concerns.
- India aligns with the Quad (US, Japan, Australia, India) to balance China.
- Both countries cooperate in BRICS, SCO, and RIC forums.

Areas of Cooperation

- Shared interests in climate change negotiations and global trade reforms.
- Cultural ties through Buddhism, yoga, and people-to-people exchanges.
- Multilateral engagement despite bilateral tensions.

Recent Developments

- Galwan clash (2020) led to casualties on both sides, first in 45 years.
- Disengagement talks are ongoing but unresolved in key friction points.
- India has diversified supply chains to reduce China dependence.
- Strategic rivalry intensified in the Indo-Pacific region.

PYQ REFERENCE:

Q. Consider the following:

1. Asian Infrastructure Investment Bank
2. Missile Technology Control Regime
3. Shanghai Cooperation Organisation

India is a member of which of the above?

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

Source:

<https://www.thehindu.com/news/national/ministry-of-external-affairs-statement-on-pm-modi-chinese-president-xi-jinping-meeting-in-tianjin/article69996067.ece>

98. Bureau of Immigration (BoI) in India

98. With reference to the Bureau of Immigration (BoI) in India, consider the following statements:

1. It functions under the Ministry of External Affairs.
2. It is responsible for immigration control and border management at air, sea, and land ports.
3. It issues passports and visa clearances to Indian citizens.
4. It coordinates with the Central Board of Indirect Taxes and Customs (CBIC) for immigration and customs enforcement.

Which of the statements given above are correct?

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

Answer: C. 2 and 4 only

Explanation:

In NEWS: Immigration bureau set to check fraud, deport foreigners

Bureau of Immigration (BoI) in India:

- The Bureau of Immigration (BoI) functions under the **Ministry of Home Affairs**, not the Ministry of External Affairs. **Hence statement 1 is incorrect.**
- The BoI is primarily responsible for **immigration control and border management** at all air, sea, and land entry points into India, ensuring proper monitoring and regulation of cross-border movements. **Hence statement 2 is correct.**
- The BoI **does not issue passports or visa clearances**. Passport issuance is handled by the **Passport Seva Division under the Ministry of External Affairs**, while visa clearances are managed by various **Foreigners Regional Registration Offices (FRROs)**. **Hence statement 3 is incorrect.**
- The BoI works in coordination with the **Central Board of Indirect Taxes and Customs (CBIC)** to enforce immigration and customs regulations effectively at ports and borders. **Hence statement 4 is correct.**

PYQ REFERENCE: (2023)

Q. Consider the following statements:

1. Recently, all the countries of the United Nations have adopted the first-ever compact for international migration, the 'Global Compact for Safe, Orderly and Regular Migration (GCM)'.
2. The objectives and commitments stated in the GCM are binding on the UN member countries.
3. The GCM addresses internal migration or internally displaced people also in its objectives and commitments.

How many of the above statements are correct?

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

Source:

<https://www.thehindu.com/news/national/bureau-of-immigration-empowered-to-examine-immigration-fraud-deport-foreigners/article70001481.ece>

99. Katchatheevu island

99. The island of Katchatheevu is located in:

- (a) Gulf of Mannar
- (b) Palk Strait
- (c) Andaman Sea
- (d) Laccadive Sea**

Answer: (b) Palk Strait

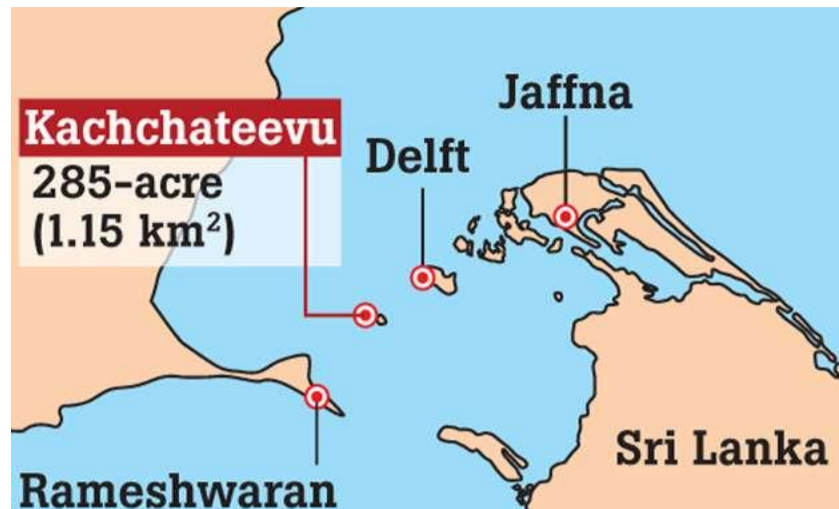
Explanation:

In NEWS: Dissanayake visits Katchatheevu, pledges to safeguard Sri Lankan territory

Katchatheevu island:

- Katchatheevu is a **small uninhabited island (≈285 acres)** in the **Palk Strait**, located between Rameswaram (India) and Jaffna (Sri Lanka). **Hence option (b) is correct.**
- Historically, it was controlled by the **Jaffna kingdom**, later came under the British, and became disputed after Independence.
- Under the **Indo-Sri Lanka Maritime Boundary Agreement (1974)**, India ceded Katchatheevu to Sri Lanka.
- The **1976 agreement** further prohibited **fishermen of both countries** from fishing in each other's waters.
- India did **not pass a Constitutional Amendment** while ceding the island, which remains a subject of constitutional and political debate.
- The **Supreme Court has held (Berubari case, 1960)** that ceding territory requires a constitutional amendment; hence, Katchatheevu's transfer is often questioned.
- The island has **no permanent population**, but is of **strategic importance** in the Palk Strait.
- The **St. Anthony's Church** located on the island is a site of an annual festival attended by fishermen from both India and Sri Lanka.
- Tamil Nadu fishermen frequently cross into Sri Lankan waters around Katchatheevu, leading to **detentions/arrests by the Sri Lankan Navy**.

- Katchatheevu is a recurring issue in India-Sri Lanka relations, especially raised by political parties in Tamil Nadu.



PYQ REFERENCE: (2016)

Q. Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 metres and has orange-coloured fruit pulp. In which part of India has it been discovered?

- (a) Andaman Islands
- (b) Anaimalai Forests
- (c) Maikala Hills
- (d) Tropical rain forests of northeast

Source:

<https://www.thehindu.com/news/international/dissanaya-ke-visits-katchatheevu-pledges-to-safeguard-sri-lankan-territory/article70000992.ece>

100. Afghanistan Earthquake

100. Consider the following statements:

Statement-I : Earthquakes do not occur in the interior of tectonic plates

Statement-II: Earthquakes are only caused by plate boundary interactions

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I.
- (c) Statement-I is correct but Statement-II is incorrect.
- (d) Statement-I is incorrect but Statement-II is correct.

Answer: (d) Statement-I is incorrect but Statement-II is correct.

Explanation:

In NEWS: Afghanistan Earthquake Today Live Updates: Quake toll rises to 1,124, at least 3,251 injured

- While it is true that **most earthquakes occur along plate boundaries** due to interactions like subduction, collision, and

transform faulting, it is **incorrect to say that earthquakes do not occur in the interior of tectonic plates. Hence statement 1 is incorrect.**

- Such **intraplate earthquakes**, though less frequent, can be destructive. The 1993 Latur earthquake in Maharashtra and the 1811-12 New Madrid earthquakes in the U.S. are key examples.

- These quakes are often caused by the reactivation of ancient faults or crustal weaknesses within stable continental regions. **Hence statement 2 is correct.**

PYQ REFERENCE: (2023)

Q. Consider the following statements:

1. In a seismograph, P waves are recorded earlier than S waves.
2. In P waves, the individual particles vibrate to and fro in the direction of wave propagation whereas in S waves, the particles vibrate up and down at right angles to the direction of wave propagation.

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

Source:

<https://indianexpress.com/article/world/afghanistan-earthquake-live-updates-death-toll-rescue-operation-destruction-10223395/>

101. Sudan Landslide

101. Consider the following statements:

Statement-I : Landslides occur primarily in hilly or mountainous regions with steep slopes.

Statement-II: Heavy rainfall is a common trigger for landslides.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I.
- (c) Statement-I is correct but Statement-II is incorrect.
- (d) Statement-I is incorrect but Statement-II is correct.

Answer: (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.

Explanation:

In NEWS: More than 1,000 people killed and village wiped out in Sudan landslide

- Landslides are **more frequent in regions with steep slopes**, where gravitational forces can easily displace loose or weathered material. **Hence statement 1 is correct.**

- This includes mountain ranges like the Himalayas, Andes, Alps, etc.
 - Slope angle is a **major geomorphological factor** in landslide susceptibility.
 - **Rainfall infiltration** reduces cohesion in soil and rock layers, increasing pore water pressure. **Hence statement 2 is correct.**
 - This can **destabilize slopes**, especially in already weathered or loosely packed material.
 - In monsoonal regions, **rainfall-induced landslides are common**, e.g., in Western Ghats, Northeastern India, Japan, Philippines, etc.
- Does Statement-II explain Statement-I?**
- The reason landslides are more **common in hilly terrain** is because **rainwater interacts with steep slopes**, accelerating mass wasting processes.
 - **Heavy rainfall → saturates steep slopes → leads to landslides.**
 - Therefore, **Statement-II is a valid and correct explanation for Statement-I.**

PYQ REFERENCE: (2024)

Q. Consider the following statements : (2024)

Statement-I: The atmosphere is heated more by incoming solar radiation than by terrestrial radiation.

Statement-II: Carbon dioxide and other greenhouse gases in the atmosphere good absorbers of long wave radiation

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct**

Source:

<https://www.thehindu.com/news/international/landslide-in-sudans-darfur-wipes-out-village-killing-more-than-1000-people/article70003087.ece>

102. Immigration and Foreigners Act, 2025

102. With reference to the Immigration and Foreigners Act, 2025, consider the following statements:

1. The Act empowers Foreigners Tribunals with the powers of a first-class judicial magistrate.
2. The Act allows the government to send persons to detention centers if they fail to prove their citizenship.
3. While the law applies across India, Foreigners Tribunals currently operate only in Assam.

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: FTs can issue arrest warrants, send 'foreigners' to detention centres

- The **Immigration and Foreigners Order, 2025**, notified under the new Act, grants Foreigners Tribunals (FTs) the powers equivalent to those of a **first-class judicial magistrate. Hence Statement 1 is correct**
- This includes powers such as issuing arrest warrants against individuals who fail to appear before the tribunal.
- The Order allows the government to send individuals to **detention or holding centers** if they fail to provide proof that they are not foreigners. **Hence Statement 2 is correct**
- This provision, previously implemented via executive orders, is now codified in law.
- The **Act and Order are applicable nationwide**, but **FTs are presently functional only in Assam. Hence Statement 3 is correct**
- In other states, cases of illegal migration are handled by regular courts, not dedicated tribunals.

PYQ REFERENCE: (2017)

Q. With reference to the 'Prohibition of Benami Property Transaction Act, 1988 (PBPT Act)', consider the following statements:

1. A property transaction is not treated as a benami transaction if the owner of the property is not aware of the transaction.
2. Properties held benami are liable for confiscation by the Government.
3. The Act provides for three authorities for investigations but does not provide for any appellate mechanism.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/news/national/foreigners-tribunals-can-issue-arrest-warrants-send-people-to-detention-centres/article70005218.ece#:~:text=The%202025%20order%2C%20which%20replaces,fails%20to%20appear%20in%20person.>

103. Global Peace Index 2025

103. The Global Peace Index (GPI) 2025 which was seen in news is released by

- (a) World Economic Forum (WEF)
- (b) Institute for Economics & Peace (IEP)
- (c) Transparency International
- (d) United Nations Development Programme (UNDP)

Answer: (b) Institute for Economics & Peace (IEP)

Explanation:

In NEWS: India ranks 115th in the Global Peace Index (GPI) 2025.

Global Peace Index (GPI) 2025

- The Global Peace Index (GPI) 2025 is published by the Institute for Economics & Peace (IEP). **Hence option (b) is correct.**
- It ranks countries on parameters like peace, governance, social trust, and security.
- Iceland has topped the index for the 18th consecutive year (since 2008).
- India ranks 115th, reflecting challenges in internal security and harmony.
- Challenges: regional disputes, urban crime, communal and internal tensions.
- Despite rich cultural diversity, achieving higher safety and harmony is difficult.
- Singapore is the only Asian country in the top 10 list.

PYQ REFERENCE: (2019)

Q. The Global Competitiveness Report is published by the

- (a) International Monetary Fund
- (b) United Nations Conference on Trade and Development
- (c) World Economic Forum**
- (d) World Bank

Source: <https://www.gktoday.in/global-peace-index-2025/>

104. Ganga Waters Agreement of 1996

104. Consider the following statements with respect to the Ganga Waters Agreement of 1996:

1. It was signed between India and Bangladesh.
2. It is a 30-year treaty valid from 1996 to 2026.
3. It governs the sharing of Ganga River water at Farakka and Teesta including monsoon season flows.

How many of the above statements are correct?

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

Answer: (b) Only two

Explanation:

In NEWS: India and Bangladesh to hold talks on water sharing

The Ganga Waters Agreement 1996:

- The **Ganga Waters Agreement** was signed between **India and Bangladesh** on **12th December 1996**. **Hence statement 1 is correct.**
- The agreement was signed by **Prime Minister H.D. Deve Gowda** (India) and **Prime Minister Sheikh Hasina** (Bangladesh).

- It is a **30-year treaty** (valid from **1996 to 2026**) that governs the **sharing of Ganga River water at Farakka**. **Hence statement 2 is correct.**

- The treaty aims to ensure the **fair and equitable distribution of Ganga waters**, especially during the **lean season** (January 1 to May 31).

- The treaty was signed in response to Bangladesh's concern over **reduced water flow in the Padma River**, particularly during dry months.

- The **Farakka Barrage**, constructed by India in **West Bengal**, plays a central role in diverting water from the Ganga to the **Hooghly River** to keep the Kolkata port navigable.

- Under the agreement, if water flow at Farakka falls below **70,000 cusecs**, then **India and Bangladesh share the available water equally**.

- A **Joint Committee** comprising representatives from both countries was established to monitor:

- Water flow at Farakka
- Compliance with the treaty
- Data exchange and reporting

- The treaty includes a **fixed schedule of water allocation** depending on the flow levels at Farakka during the lean period.

- The agreement has played a crucial role in **strengthening India-Bangladesh relations** and is considered a model for **bilateral river water sharing**.

- The treaty does **not cover monsoon season flows** or other rivers like the **Teesta**, which remains a **separate unresolved issue**. **Hence statement 3 is incorrect.**

- The treaty is due for **review or renewal in 2026**, and discussions are ongoing regarding future terms in light of **climate change and water scarcity**.

Source: <https://www.thehindu.com/news/national/amidst-tensions-india-bangladesh-joint-river-commission-to-meet-on-september-9/article70022702.ece>

104. Baltic Sea

104. Which of the following countries border the Baltic Sea?

1. Belarus
2. Finland
3. Estonia
4. Ukraine

Select the correct answer using the code below:

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

Answer: (b) 2 and 3 only

Explanation:

In NEWS: 'Sharp rise in GPS jamming in aviation over Baltic Sea'

The Baltic Sea:

- The **Baltic Sea is a brackish inland sea** located in **Northern Europe**, connected to the **North Sea via the Danish Straits** (Kattegat and Skagerrak).

- It is bordered by nine countries: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden. **Hence option (b) is correct.**
- The salinity of the Baltic Sea is low due to the inflow of large rivers and limited exchange with saltwater from the North Sea.
- Major rivers flowing into the Baltic Sea include the Neva, Vistula, Daugava, and Oder.
- The deepest point of the Baltic Sea is the Landsort Deep, which is around 459 meters deep.
- The Kaliningrad region of Russia, located between Poland and Lithuania, is a strategic exclave on the Baltic coast.
- The Baltic Sea is of high military and strategic importance, especially in the context of NATO–Russia tensions.
- The region hosts the Nord Stream 1 and 2 pipelines, which supply natural gas from Russia to Germany via the seabed.
- The Baltic Sea is one of the most polluted seas in the world due to eutrophication, overfishing, and marine traffic.
- GPS jamming and spoofing incidents affecting aviation and maritime navigation have increased significantly in the Baltic Sea region since 2023, with Russia suspected of being behind the interference.
- In response to rising threats, Sweden and Finland formally joined NATO, increasing Western presence in the Baltic region.
- Major ports along the Baltic Sea include Gdańsk (Poland), St. Petersburg (Russia), Riga (Latvia), and Helsinki (Finland).
- The Baltic Sea is semi-enclosed, making it vulnerable to environmental degradation due to slow water exchange with the Atlantic.
- The HELCOM (Helsinki Commission) is an intergovernmental body working to protect the marine environment of the Baltic Sea.



PYQ REFERENCE: (2017)

Q. Mediterranean Sea is a border of which of the following countries?

1. Jordan
2. Iraq
3. Lebanon
4. Syria

Select the correct answer using the code given below:

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

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/146805/OPS/G4UEQS75H.1+GFCERS7ME.1.html

105. Malacca Straits

105. The Strait of Malacca connects which of the following?

- (a) Arabian Sea and Bay of Bengal
- (b) South China Sea and Andaman Sea
- (c) Red Sea and Mediterranean Sea
- (d) East China Sea and Philippine Sea

Answer: (b) South China Sea and Andaman Sea

Explanation:

In NEWS: Singapore backs India on patrolling Malacca Straits

Strait of Malacca:

- The Strait of Malacca is a narrow waterway between the Malay Peninsula (Malaysia) and the island of Sumatra (Indonesia).

It connects the Indian Ocean (via the Andaman Sea) with the Pacific Ocean (via the South China Sea). **Hence option (b) is correct.**

- It is approximately 890 km long and 25–150 km wide, with the narrowest point being 2.8 km near Singapore (Phillip Channel).
- The strait is a major maritime chokepoint, with over 80,000 ships passing through annually.
- It handles about 40% of global seaborne trade, making it one of the busiest and most important shipping lanes in the world.
- It is especially critical for China, Japan, and South Korea, which depend heavily on oil imports passing through this route.
- Countries bordering the strait: India (via Andaman & Nicobar monitoring), Indonesia, Malaysia, and Singapore (close to southern end).
- The strait is vulnerable to piracy, shipping congestion, and maritime accidents due to its narrowness and heavy traffic.
- It is strategically important for India's maritime security — the Indian Navy monitors traffic from the Andaman & Nicobar Islands, especially Indira Point.
- China's "Malacca Dilemma" refers to its strategic vulnerability due to heavy reliance on this single maritime route.
- India's SAGAR (Security and Growth for All in the Region) policy and QUAD naval cooperation enhance security in this region.
- In the event of a blockade, ships would have to reroute via Sunda or Lombok Strait, increasing costs and time.

Strait of Malacca – Map:

West: Andaman Sea → Indian Ocean

East: South China Sea → Pacific Ocean

North: Peninsular Malaysia
South: Sumatra (Indonesia)
South-East end: Singapore



PYQ REFERENCE: (2022)

Q. Turkey is located between

- (a) Black Sea and Caspian Sea
- (b) Black Sea and Mediterranean Sea**
- (c) Gulf of Suez and Mediterranean Sea
- (d) Gulf of Aqaba and Dead Sea

Source: <https://www.thehindu.com/news/national/india-singapore-relations-go-far-beyond-diplomacy-pm-modi/article70011429.ece>

106. India - Israel Relationship

106. Consider the following statements:

Statement-I: Israel is among the top three arms suppliers to India.

Statement-II: India and Israel has the signed the Free Trade Agreement (FTA)

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct

Answer: (c) Statement-I is correct but Statement-II is incorrect

Explanation:

In NEWS: Israeli Finance Minister Smotrich visits India, signs Bilateral Investment Agreement

India-Israel Relations: Key Highlights

1. Establishment of Full Diplomatic Ties:

India established full diplomatic relations with Israel in **1992**, although recognition came earlier in **1950**.

2. Strategic Partnership:

The relationship has evolved into a **strategic partnership**, especially in **defence, agriculture, water management, and cybersecurity**.

3. Defence Cooperation:

Israel is among the **top three arms suppliers to India**. India imports UAVs, missiles, radars, and border management technologies from Israel. **Hence statement I is correct.**

4. Agricultural Collaboration:

Through the **India-Israel Agricultural Project (IIAP)**, Israel has helped set up **Centers of Excellence** in various Indian states, promoting modern farming techniques.

5. High-Level Visits:

- PM Narendra Modi visited Israel in **2017**, the first Indian PM to do so.
- PM Benjamin Netanyahu visited India in **2018**.

6. Counter-Terrorism & Intelligence Sharing:

India and Israel cooperate closely on **counter-terrorism, intelligence sharing, and homeland security**.

7. Technology and Innovation:

Israel's strength in **startups, water technology, and renewable energy** complements India's development needs.

8. Water & Irrigation:

Israel supports India with advanced **drip irrigation, desalination, and water reuse** technologies.

9. Trade and Economic Ties:

Bilateral trade stands at around **\$10 billion** (goods + services). Key sectors: **diamonds, defence, tech, and agriculture**.

10. Free Trade Agreement (FTA):

Talks for an India-Israel FTA are ongoing but remain inconclusive. **Hence statement II is incorrect.**

11. Diaspora Connection:

Around **85,000 Indian Jews** live in Israel, creating a cultural bridge between the two nations.

12. UN and Diplomatic Stances:

India traditionally supported the Palestinian cause but has **balanced ties** in recent years, often abstaining from anti-Israel resolutions.

13. Recent Context (Gaza Conflict):

India has reiterated support for **Israel's right to self-defence** while also calling for **restraint and humanitarian concern** in the region.

PYQ REFERENCE: (2023)

Q. Consider the following statements:

Statement-I: Israel has established diplomatic relations with some Arab States.

Statement-II: The 'Arab Peace Initiative' mediated by Saudi Arabia was signed by Israel and the Arab League.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect**
- (d) Statement-I is incorrect but Statement-II is correct

Source: <https://www.thehindu.com/business/india-israel-ink-bilateral-investment-treaty/article70025459.ece>

107. Red Sea

107. Consider the following statements:

1. The Red Sea is one of the world's saltiest bodies of water.
2. The Red Sea was formed by tectonic rifting, as the Indian plate moves away from the African plate
3. The Red Sea has extensive coral reefs, especially along the coasts of Egypt, Sudan, and Saudi Arabia, supporting rich biodiversity.
4. The Red Sea experiences huge river inflow which makes the river saltier.

Which of the statement(s) given above is/are correct?

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

Answer: (c) 1 and 3 only

Explanation:

In NEWS: Red Sea cable cut interrupts internet in Asia: How data travels to you under the ocean

Red Sea:

- The Red Sea is a seawater inlet of the Indian Ocean, located between northeastern Africa and the Arabian Peninsula.
- It is connected to the Mediterranean Sea via the Suez Canal in the north and to the Gulf of Aden and Arabian Sea in the south through the Bab el-Mandeb Strait.
- Countries bordering the Red Sea include:
 - Africa: Egypt, Sudan, Eritrea
 - Asia: Djibouti (via Bab el-Mandeb), Saudi Arabia, Yemen
- The Red Sea is one of the world's saltiest bodies of water, due to high evaporation and low rainfall. Hence statement 1 is correct.
- It is approximately 2,250 km long, with an average width of 355 km and a maximum depth of about 2,500 meters.
- The Red Sea was formed by tectonic rifting, as the Arabian plate moves away from the African plate — making it a young ocean basin in formation. Hence statement 2 is incorrect.
- It has extensive coral reefs, especially along the coasts of Egypt, Sudan, and Saudi Arabia, supporting rich biodiversity. Hence statement 3 is correct.
- The Red Sea is a major global shipping route, particularly due to the Suez Canal, which links Europe and Asia — making it geopolitically and economically vital.
- It holds strategic military importance, especially near the Bab el-Mandeb Strait, a chokepoint for maritime trade.
- The name "Red Sea" is believed to derive from either the seasonal blooms of red-colored cyanobacteria (Trichodesmium) or from ancient directional color systems (where "red" meant south).
- It experiences no river inflow, resulting in very high salinity, typically between 36–41 PSU (Practical Salinity Units). Hence statement 4 is incorrect.

- Periodic conflicts and tensions in surrounding regions (e.g., Yemen crisis, Houthi attacks on ships) have raised concerns over freedom of navigation in the Red Sea.

PYQ REFERENCE: (2024)

Q. Consider the following statements:

1. The Red Sea receives very little precipitation in any form.
2. No water enters the Red Sea from rivers.

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

Source:

<https://indianexpress.com/article/explained/explained-sci-tech/undersea-cables-red-sea-internet-working-simplified-10239041/>

108. The Grand Ethiopian Renaissance Dam (GERD)

108. The Grand Ethiopian Renaissance Dam is situated on which among the following rivers?

- (a) Zambezi
- (b) Congo
- (c) Limpopo
- (d) Blue Nile

Answer: (d) Blue Nile

Explanation:

In NEWS: Ethiopia's mega dam has taken 14 years to build: What it means for the Nile's 11 river states

The Grand Ethiopian Renaissance Dam (GERD): Key Statements

- GERD is Africa's largest hydroelectric power project, built on the Blue Nile River in the Benishangul-Gumuz region of Ethiopia, near the Sudanese border.
- Construction of the dam began in April 2011 and was officially inaugurated on September 9, 2025, after over 14 years of work.
- The dam has a power generation capacity of approximately 5,150 megawatts, which is expected to double Ethiopia's electricity output.
- GERD was funded primarily through domestic sources, including public donations, diaspora bonds, and government contributions—making it a symbol of national pride and self-reliance.
- Ethiopia views GERD as essential for economic development, rural electrification, and poverty reduction, and asserts its sovereign right to utilize its natural resources.



Blue Nile River:

- The Blue Nile River is one of the two major tributaries of the Nile River, the longest river in the world.
- Origin: The Blue Nile starts at Lake Tana in the Ethiopian Highlands.
- Country of Origin: Ethiopia
- Flows Through: Ethiopia → Sudan
- Confluence: It joins the White Nile in Khartoum, the capital of Sudan, forming the main Nile River.
- contributes about 80–85% of the water to the Nile River, especially during the rainy season.
- Crucial for agriculture and hydroelectric power in both Ethiopia and Sudan.
- The river's flow varies greatly between the wet and dry seasons, impacting agriculture and water availability downstream.

PYQ REFERENCE: (2022)

Q. Which one of the following lakes of West Africa has become dry and turned into a desert?

- (a) Lake Victoria
- (b) Lake Faguibine**
- (c) Lake Oguta
- (d) Lake Volta

Source: <https://www.downtoearth.org.in/africa/ethiopias-mega-dam-has-taken-14-years-to-build-what-it-means-for-the-niles-11-river-states-why-its-so-controversial>

109. Altai gas pipeline

109. The Altai Gas Pipeline, often referred to as Power of Siberia 2, is a proposed natural gas pipeline between:

- (a) Russia and India
- (b) Russia and China
- (c) Kazakhstan and China
- (d) Turkmenistan and Afghanistan

Answer: (b) Russia and China

Explanation:

In NEWS: A pipeline deal to send Russian gas to China shows Beijing's sway in ties

The Altai Gas Pipeline:

- The **Altai Gas Pipeline** is a proposed **natural gas pipeline project between Russia and China. Hence option (b) is correct.**
- It is also referred to as the **Power of Siberia 2 pipeline.**
- The pipeline is planned to run through the **Altai region of Russia into Xinjiang province of China.**
- It aims to deliver about **30 billion cubic meters (bcm) of natural gas per year** to China.
- The project strengthens **Russia-China energy cooperation**, reducing China's dependence on seaborne LNG imports.
- It also helps Russia **diversify its energy exports** away from Europe, especially after Western sanctions.
- The route is considered shorter and more cost-effective than other alternatives.
- Negotiations have been ongoing since **2006**, but final agreements on pricing and construction timelines are still pending.
- The project is strategically significant as it would **connect West Siberian gas fields** (which earlier supplied Europe) to China.
- If completed, it will make China the **largest importer of Russian natural gas.**

PYQ REFERENCE: (2024)

Q. Consider the following statements:

Statement-I: Sumed pipeline is a strategic route for Persian Gulf oil and natural gas shipment to Europe

Statement-II: Sumed pipeline connects the Red Sea with the Mediterranean Sea.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains statement-I**
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Source: THE HINDU

110. Palk Strait

110. Consider the following map:



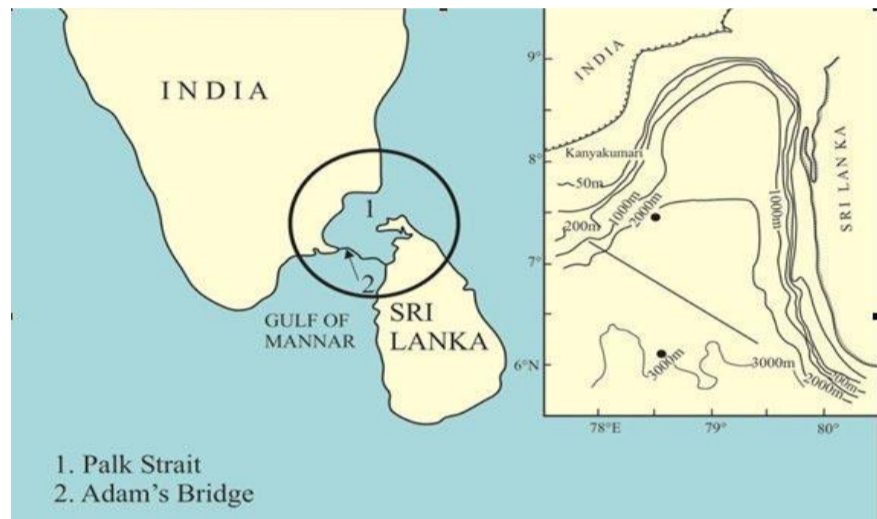
With reference to the above map identify the location marked in 1 and 2?

- (a) Palk Strait and Adam's Bridge
- (b) Malacca Strait and Bering Strait
- (c) Bosphorus Strait and Gulf of Sri Lanka
- (d) Gulf of Bay and Strait of Gibraltar

Answer: (a) Palk Strait and Adam's Bridge

Explanation:

In NEWS: The way forward on Katchatheevu, Palk Strait disputes



Hence option (a) is correct.

Significance of Palk Strait:

- Part of the Gulf of Mannar Biosphere Reserve (UNESCO-recognized).
- Adam's Bridge / Ram Setu: Mythologically believed to have been built by Lord Rama's army in the Hindu epic Ramayana.
- Strategic Region: Played roles in colonial trade routes and regional navigation.

Conflicting areas:

- **India-Sri Lanka Maritime Agreements**
 - 1974 Agreement: India ceded Katchatheevu Island to Sri Lanka.
 - 1976 Agreement: Formal maritime boundary demarcated; both sides agreed not to allow fishing in each other's waters.
- **Fishing Disputes**
 - Indian fishermen often cross into Sri Lankan waters (rich in fish).
 - Sri Lanka arrests or detains Indian fishermen for illegal entry.
 - Major source of tension, especially for Tamil Nadu.
- **Sethusamudram Shipping Canal Project**
 - A proposed canal through the Palk Strait to create a continuous sea route around India.
 - Would cut through Adam's Bridge, raising:
 - Religious objections (Hindu beliefs).
 - Environmental concerns (coral reefs, marine life).
 - Strategic concerns (Sri Lankan sensitivities).

Proposed Solutions ("The Way Forward")

- **Humane, Differentiated Approach:** Recognize distinction between artisanal fishers (subsistence) and trawler operators (commercial). Provide transitional protection to small fishers.
- **Dialogue Between Fisher Communities:** Indian and Sri Lankan fisher organizations should agree on quotas, seasonal rights, and regulated access.

● **Cultural Sensitisation & Fraternal Solidarity:** Emphasize shared Tamil identity and mutual suffering (e.g., during Sri Lanka's civil war). Use Tamil media, community leaders, and MPs to spread awareness.

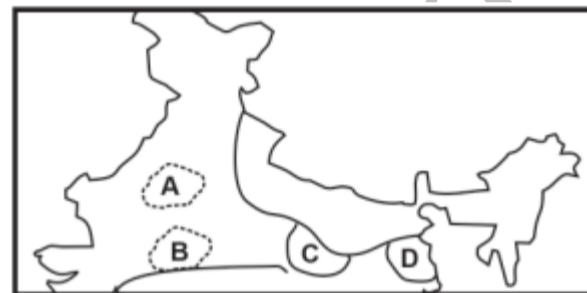
● **Joint Resource Management:** Inspired by Baltic Sea models — shared quotas, deep-sea fishing promotion, marine research, and ecological preservation.

● **De-politicising the Issue:** Shift focus from populist "reclaim Katchatheevu" narratives to realistic diplomacy. Emphasize treaty obligations, quiet cooperation, and regional harmony.

● **Multi-Level Diplomacy:** Combine central government efforts with State/Provincial dialogues involving Tamil Nadu and Northern Provincial Council of Sri Lanka.

PYQ REFERENCE: (1997)

Q. The following map shows four of the sixteen mahajanapadas that existed in ancient India:



The places marked A, B, C and D respectively are:

- (a) Matsya, Chedi, Kosala, Anga
- (b) Surasena, Avanti, Vatsa, Magadha
- (c) Matsya, Avanti, Vatsa, Anga**
- (d) Surasena, Chedi, Kosala, Magadha

Source: <https://www.thehindu.com/opinion/lead/the-way-forward-on-katchatheevu-palk-strait-disputes/article70034563.ece#:~:text=The%20way%20for%20ward%20involves%20multiple.empathy%20that%20overcomes%20media%20distortions>

111. Scarborough Shoal

111. Which one of the following statements best reflects the issue with Scarborough Shoal, sometimes mentioned in the news?

- (a) It is a coral atoll in the Indian Ocean claimed exclusively by India and Sri Lanka.
- (b) It is a disputed maritime area in the South China Sea claimed by China, the Philippines, and Taiwan.
- (c) A permanent American military base has been set up there to help Taiwan to increase its defence capabilities.
- (d) It is an uninhabited island declared as a marine protected area by ASEAN countries with no territorial claims.

Answer: (b) It is a disputed maritime area in the South China Sea claimed by China, the Philippines, and Taiwan.

Explanation:

In NEWS: China says intercepted Philippine ships at disputed South China Sea shoal

Scarborough Shoal:

- Scarborough Shoal is a group of small islands and reefs located in the South China Sea, strategically positioned between the Philippines and China.
- It is claimed by multiple countries, primarily China, the Philippines, and Taiwan, leading to ongoing territorial disputes.
Hence option (b) is correct.
- The area is rich in marine resources and lies near important shipping lanes, which makes it geopolitically significant.
- China asserts historical claims over almost the entire South China Sea, including Scarborough Shoal, based on the "Nine-Dash Line."
- The Philippines contests this claim, citing proximity and international law, especially after the 2016 ruling by the Permanent Court of Arbitration that invalidated China's expansive claims.
- Taiwan also claims sovereignty over the shoal, aligning largely with China's claims.
- These overlapping claims have resulted in frequent confrontations, restrictions on fishing, and increased military presence in the area.



PYQ REFERENCE: (2022)

Q. Which one of the following statements best reflects the issue with Senkaku Islands, sometimes mentioned in the news?

- (a) It is generally believed that they are artificial islands made by a country around South China Sea.
- (b) China and Japan engage in maritime disputes over these islands in East China Sea.**
- (c) A permanent American military base has been set up there to help Taiwan to increase its defence capabilities.
- (d) Though International Court of Justice declared them as no man's land, some South-East Asian countries claim them.

Source:

<https://www.thehindu.com/news/international/china-says-intercepted-philippine-ships-at-disputed-south-china-sea-shoal/article70055319.ece>

112. India's deep-sea mineral exploration

112. With reference to India's deep-sea mineral exploration, consider the following statements:

1. India has the rights to explore polymetallic sulphides in the Carlsberg Ridge of the Indian Ocean.
2. India can both explore and commercially mine the deep sea mineral resources in the Indian Ocean.
3. The exploration activities are governed by the provisions of the United Nations Convention on the Law of the Sea (UNCLOS).

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

Answer: (c) 1 and 3 only

Explanation:

In NEWS: India gets licence to scour new part of Indian Ocean for precious metals

India's deep-sea mineral exploration:

- India has secured an **exploration licence** from the International Seabed Authority (ISA) to explore **polymetallic sulphides** in the **Carlsberg Ridge** region of the Indian Ocean.
Hence statement 1 is correct.
- The area allocated for exploration covers about **300,000 sq km**.
- The minerals targeted include **cobalt, copper, nickel, and manganese**, which are critical for clean energy technologies.
- The licence is for **exploration only**, not commercial mining.
Hence statement 2 is incorrect.
- India already holds earlier ISA contracts:
 - **2002:** Polymetallic nodules in the Central Indian Ocean Basin.
 - **2016 (valid till 2031):** Polymetallic sulphides in parts of the Indian Ocean Ridge.
- The exploration is regulated under the **United Nations Convention on the Law of the Sea (UNCLOS)** and supervised by ISA. **Hence statement 3 is correct.**
- **Environmental concerns** exist regarding deep-sea exploration, including risks to biodiversity and fragile marine ecosystems.
- This move strengthens India's access to **critical minerals** required for **energy transition** and enhances its **strategic presence** in the Indian Ocean.

PYQ REFERENCE: (2021)

Q. Consider the following statements:

1. The Global Ocean Commission grants licences for seabed exploration and mining in international waters.
2. India has received licences for seabed mineral exploration in international waters
3. 'Rare earth minerals' are present on the seafloor in international waters.

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

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/india-gets-licence-to-scour-new-part-of-indian-ocean-for-precious-metals/article70053704.ece>

113. UNESCO Tentative Lists

113. Consider the following statements:

1. A site or property must be on a country's Tentative List before it can be nominated for inscription in the list of UNESCO Heritage Sites.
2. The Tentative List has to be revised and updated by the countries every 10 years at least.

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

Answer: (c) Both 1 and 2

Explanation:

In NEWS: Andhra's Tirumala Hills, Erra Matti Dibbalu eye World Heritage tag

UNESCO Tentative List:

- A Tentative List is an inventory of sites that a State Party (i.e. a country that has ratified the World Heritage Convention) may consider nominating in the future for inscription on the UNESCO World Heritage List.
- A site or property must be on a country's Tentative List before it can be nominated for inscription. **Hence statement 1 is correct.**
- The Tentative List is not exhaustive; it's expected that countries revise them and update them every 10 years at least. **Hence statement 2 is correct.**

UNESCO Nomination Process – Key Steps:

1. Tentative List: A country first identifies potential heritage sites in a Tentative List — only these can be nominated.
2. Nomination Dossier: A detailed file is prepared, including maps, legal status, authenticity, comparative analysis, and management plans.
3. Review for Completeness: UNESCO checks if the dossier is complete. Incomplete ones are returned for revision.
4. Advisory Body Evaluation:
 - a. ICOMOS evaluates cultural sites
 - b. IUCN evaluates natural sites
 - c. ICCROM provides conservation guidance (mainly for cultural sites)

5. Committee Decision: The World Heritage Committee reviews evaluations and decides to inscribe, defer, refuse, or request more info.

6. Selection Criteria: The site must show Outstanding Universal Value (OUV) and meet at least one of 10 criteria in the Operational Guidelines.

Selection criteria:

- to represent a masterpiece of human creative genius;
- to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

PYQ REFERENCE: (2024)

Q. Which one of the following was the latest inclusion in the Intangible Cultural Heritage List of UNESCO?

- (a) Chhau dance
 (b) Durga puja
(c) Garba dance
 (d) Kumbh mela

Source:

<https://www.newindianexpress.com/states/andhra-pradesh/2025/Sep/13/andhras-tirumala-hills-erra-matti-dibbalu-eye-world-heritage-tag>
<https://whc.unesco.org/en/tentativelists/>

114. India - Venezuela Relations

114. Consider the following statements regarding India-Venezuela relations:

1. India and Venezuela established diplomatic relations in the 1950s.
2. Venezuela has historically been an important supplier of crude oil to India.
3. Recent cooperation between India and Venezuela includes collaboration on digital public infrastructure projects.
4. Both countries are members of the Shanghai Cooperation Organisation (SCO).

Which of the statements given above is/are correct?

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

Answer: (b) 1, 2 and 3 only

Explanation:

In NEWS: India and Venezuela have initiated a partnership to launch pilot projects in Digital Public Infrastructure (DPI) across sectors such as health, education, agriculture, and digital payments.

India - Venezuela Relations:

- Diplomatic Ties: India and Venezuela have maintained diplomatic relations since 1959. India has an embassy in Caracas, and Venezuela has an embassy in New Delhi. **Hence statement 1 is correct.**
- Trade Relations: Bilateral trade includes the exchange of crude oil and petroleum products, with Venezuela historically being one of India's important suppliers of oil. Other trade items include pharmaceuticals, machinery, and agricultural products.
- Energy Cooperation: Venezuela is an oil-rich country and has been a significant crude oil supplier to India. Energy ties are a key pillar in bilateral relations. **Hence statement 2 is correct.**
- Recent Developments: India is expanding cooperation beyond energy, including digital public infrastructure projects, health, education, agriculture, and technology sectors. **Hence statement 3 is correct.**
- Strategic Partnership: Both countries have expressed interest in enhancing ties through technology sharing and capacity building, particularly in areas of digital governance and public service delivery.
- Multilateral Cooperation: Both nations collaborate in forums like the Non-Aligned Movement (NAM) and the United Nations.

PYQ REFERENCE: (2024)

Q. Consider the following statements:

Statement-I: Recently, Venezuela has achieved a rapid recovery from its economic crisis and succeeded in preventing its people from fleeing/emigrating to other countries.

Statement-II: Venezuela has the world's largest oil reserves

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-1 and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct**

Source: <https://www.thehindu.com/news/national/india-to-start-pilot-projects-in-venezuela/article70062704.ece>

115. Pacific Reach 2025 Exercise

115. Consider the following statements with respect to Pacific Reach Exercise 2025:

1. Pacific Reach (XPR-25) is a biennial multinational naval exercise hosted by the Philippines.
2. INS Nistar, India's latest indigenously designed and built Diving Support Vessel (DSV) participated in the exercise.

Which of the statements given above is/are correct?

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

Answer: (b) 2 only

Explanation:

In NEWS: INS Nistar Joins Multinational Exercise Pacific Reach 2025 in Singapore

Pacific Reach 2025 Exercise:

- Pacific Reach (XPR-25) is a biennial multinational naval exercise hosted by Singapore. **Hence statement 1 is incorrect.**
- It involves more than 40 countries—either as active participants or observers.

India's Participation:

- India is sending INS Nistar, its latest indigenously designed and built Diving Support Vessel (DSV), to participate in the exercise. **Hence statement 2 is correct.**
- Also, the Submarine Rescue Unit (East) of the Indian Navy is involved.
- INS Nistar will engage in submarine rescue drills and other intervention/rescue operations in the sea phase in the South China Sea.

Structure:

- Harbour Phase: Several activities including Subject Matter Expert Exchanges (SMEE), medical symposiums, cross-deck visits, discussions on submarine rescue systems.
- Sea Phase: Actual at-sea rescue / intervention operations among participating navies. INS Nistar and SRU(E) will execute rescue operations with assets from other navies.

Strategic Significance:

- Demonstrates India's capabilities in submarine rescue and deep-sea operations.

- Helps build interoperability and cooperation with many navies, strengthening India's profile as a maritime power.
- Offers a way for countries to share best practices, enhance readiness for maritime emergencies, and promote collective safety in contested or strategic waters like the South China Sea.

Source: <https://www.newsonair.gov.in/ins-nistar-joins-multinational-exercise-pacific-reach-2025-in-singapore/>

116. Chabahar port

116. With reference to the 'Chabahar port', Consider the following statements:

- Chabahar Port is Pakistan's only oceanic port, providing direct access to the Indian Ocean without passing through the Strait of Hormuz.
- It is located on the Gulf of Oman near the Arabian Sea.
- It serves as the main entry point and transshipment hub for the INSTC (International North-South Transport Corridor), connecting the Indian Ocean to the Caspian Sea.

How many of the above statements are correct?

- Only one
- Only two
- All three
- None

Answer: (b) Only two

Explanation:

In NEWS: U.S. to revoke waiver on Chabahar port sanctions

Chabahar Port:

● **Chabahar Port** is a **sea port in southeastern Iran**, on the **Gulf of Oman** near the Arabian Sea. **Hence statement II is correct.**

● It is Iran's **only oceanic port**, providing direct access to the Indian Ocean without passing through the Strait of Hormuz. **Hence statement I is incorrect.**

● The port is strategically located near **Iran-Pakistan border**, close to Gwadar Port (Pakistan, China-Pakistan Economic Corridor).

Strategic Significance

● **India-Iran cooperation:** India is developing **Chabahar Port** to gain **direct access to Afghanistan and Central Asia**, bypassing Pakistan.

● It complements India's **Connect Central Asia policy** and **INSTC (International North-South Transport Corridor)**.

○ It serves as the main Iranian entry point and transshipment hub for the INSTC, connecting the Indian Ocean to the Caspian Sea. **Hence statement III is correct.**

● Chabahar enhances India's **trade connectivity with Afghanistan, landlocked Central Asia, and Middle East.**

● It provides **counterbalance to China's Gwadar Port** in Pakistan, which is part of the China-Pakistan Economic Corridor (CPEC).

Development & Investment

● India, through **Indian companies and lines like IRCON, MMT, and IAFPL**, is investing in port infrastructure, container terminals, and cargo handling.

● **Development agreement: India, Iran, Afghanistan signed MoU** for port development and transit trade.

● Operational since **2017** for commercial cargo.

Economic & Geopolitical Importance

● Enables India to **export goods to Afghanistan and Central Asia** with lower logistics costs.

● Strengthens India's presence in the Indo-Pacific **maritime domain**.

● Reduces dependence on **Pakistan's transit routes** for Afghan trade.

PYQ REFERENCE: (2017)

Q. What is the importance of developing Chabahar Port by India?

- India's trade with African countries will enormously increase.
- India's relations with oil producing Arab countries will be strengthened.
- India will not depend on Pakistan for access to Afghanistan and Central Asia.**
- Pakistan will facilitate and protect the installation of a gas pipeline between Iraq and India

Source:

<https://www.thehindu.com/news/international/us-to-slap-sanctions-on-chabahar-port-operators-from-september-29/article70066959.ece>

117. H-1B Visa

117. Which of the following best describes the H-1B Visa, often seen in the news?

- A permanent residency visa issued by the U.S. for skilled migrants
- A non-immigrant work visa for specialty occupations in the U.S.
- A student visa for higher education in the U.S.
- A business visa for entrepreneurs in the U.S.

Answer: (b) A non-immigrant work visa for specialty occupations in the U.S.

Explanation:

In NEWS: U.S. clarification on H-1B calms nerves in tech circles but some warn of deferred impact

H-1B Visa:

● The H-1B visa is a **non-immigrant work visa** issued by the United States. **Hence option (b) is correct.**

● It allows **U.S. companies** to employ foreign workers in **specialty occupations** requiring theoretical or technical expertise (e.g., IT, finance, engineering, medicine).

● The initial validity is **3 years**, extendable up to **6 years** under normal conditions.

● It is **employer-sponsored** – meaning the employer applies on behalf of the foreign worker.

● India is the **largest beneficiary** of H-1B visas, with a major share going to Indian IT professionals.

● Criticism includes concerns of **outsourcing, wage suppression, and job displacement** for U.S. workers.

● Recent U.S. policy reforms often propose tightening H-1B norms to **protect American jobs** and **ensure fair wages**.

Source: <https://www.thehindu.com/news/national/h1b-visa-fee-hike-trump-fee-hike-us-impact-on-indian-technology-workers-live-updates/article70073225.ece>
https://indianexpress.com/article/explained/explained-global/l-1-visa-and-h-1b-10266306/?ref=explained_pg

118. Global South

118. Consider the following countries:

1. India
2. Indonesia
3. Japan
4. Egypt
5. Brazil
6. South Korea
7. Australia

Which of the above countries are part of Global South as separated by the Brandt Line?

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

Answer: (a) 1, 2, 4 and 5 only

Explanation:

In NEWS: Global South must work together, says Jaishankar

Global South:

● The term "Global South" refers to a group of countries, primarily in **Africa, Asia, Latin America, and Oceania**, that are generally characterized by lower economic development, less political influence in the global system, and a shared history of colonialism.

● The designation is not strictly geographical, as many of these nations, including **China and India**, are in the Northern Hemisphere.

Representative Countries of Global South:

- Asia: India, Pakistan, Bangladesh, Thailand, Indonesia, Vietnam, Philippines
- Africa: Nigeria, South Africa, Egypt, Kenya, Ghana
- Latin America: Brazil, Mexico, Argentina, Chile, Colombia
- Oceania: Papua New Guinea, Fiji

Hence 1, 2, 4 and 5 are correct.

Representative Countries of Global North:

- North America: United States, Canada
- Europe: United Kingdom, France, Germany, Italy, Sweden, Norway
- East Asia / Pacific: Japan, South Korea, Australia, New Zealand

Origin and evolution of the term

● Coined in 1969: American activist **Carl Oglesby** used the term in the magazine *Commonweal* to describe the "northern dominance" over the "global South" during the Vietnam War.

● **Replacing the "Third World":** The term gained prominence after the end of the Cold War and the collapse of the Soviet Union in 1991, which dissolved the "Second World." This rendered the Cold War-era term "Third World" obsolete, which had also become pejorative and associated with poverty. The "Global South" emerged as a more neutral alternative.

● **Brandt Line:** The idea of a global north-south divide was popularized in the 1980s by the Brandt Report, which proposed a line separating the wealthier, industrialized North from the poorer, developing South. Though now outdated, this line remains a historical reference for global inequalities.



Key characteristics and comparisons with the Global North

Feature	Global South	Global North
Economies	Historically agrarian-based and dependent on exporting raw materials. Many face challenges like high debt burdens and limited access to international financial markets.	Typically highly industrialized, with diversified and advanced economies.
Economic power	Less economic power historically, but growing rapidly. Projections suggest that by 2030, three of the four largest economies will be from the Global South (China, India, Indonesia).	Holds a disproportionate share of global wealth and controls most international finance, trade, and technology.
Political influence	Historically underrepresented in global governance bodies like the UN Security Council, World Bank, and IMF. Advocates for a more inclusive world order.	Holds significant political power in international organizations, which can lead to policies that favor developed nations.

Historical context	A shared history of colonialism and imperialism by European powers, which extracted resources and hindered local development.	Often former colonial powers that benefited from historical exploitation of the Global South.
Environmental issues	Disproportionately affected by climate change, despite having contributed far less to historical greenhouse gas emissions.	The primary historical contributor to global emissions and environmental damage.

PYQ REFERENCE: (2025)

Q. Consider the following countries:

- I. Austria
- II. Bulgaria
- III. Croatia
- IV. Serbia
- V. Sweden
- VI. North Macedonia

How many of the above are members of the North Atlantic Treaty Organization?

- (a) Only three
- (b) Only four**
- (c) Only five
- (d) All the six

Source:

<https://www.thehindu.com/news/national/external-affairs-minister-jaishankar-calls-for-stronger-global-south-solidarity-collective-push-for-united-nations-reform/article70087554.ece>

119. India-EU strategic agenda

119. Which among the following initiatives is a joint India-EU connectivity and development project?

- (a) MAHASAGAR
- (b) SAGAR-Mission
- (c) Global Maritime Security Initiative
- (d) Indo-Pacific Defense Alliance

Answer: (a) MAHASAGAR

Explanation:

In NEWS: A document issued by the European Union earlier this month, outlines its agenda for ties with India. It is based on five pillars: economy, emerging tech, security, global connectivity, and people-to-people ties

India-EU Strategic Agenda 2025:

1. Economic & Trade Cooperation

- **Bilateral Trade:** In 2024, goods trade reached **€120 billion**, with services adding another **€60 billion**.

- **Investment:** Approximately **6,000 European companies** operate in India, employing around **3 million people** directly.

- **Free Trade Agreement (FTA):** Both parties aim to conclude negotiations by the end of 2025, focusing on reducing tariff and non-tariff barriers.

- **Investment Protection Agreement (IPA):** Discussions are ongoing to safeguard investments between the two regions.

2. Global Connectivity

- **EU's Global Gateway:** Mobilizes **€300 billion** globally to support energy, digital, and transport infrastructure.

- **India's Initiatives:** India boasts initiatives such as **MAHASAGAR (Mutual and Holistic Advancement for Security and Growth)**. **Hence option (a) is correct.**

- **Collaborative Projects:** The EU-India Connectivity Partnership aims to enhance infrastructure connectivity between the two regions.

3. Emerging Technologies

- **Digital Economy:** Emphasis on cooperation in areas like **artificial intelligence, 5G, and cybersecurity**.

- **Research & Innovation:** Joint efforts to promote research and development in cutting-edge technologies.

4. Security & Defence

- **Strategic Partnership:** Plans to establish an EU-India Security and Defence Partnership focusing on:

- **Maritime Security**
- **Cybersecurity**
- **Counterterrorism**
- **Crisis Management**

- **Defense Industry Collaboration:** Enhancing cooperation in defense industrial expansion and modernization.

5. People-to-People Ties

- **Cultural Exchange:** Initiatives to promote cultural understanding and exchange programs.

- **Educational Collaboration:** Strengthening academic partnerships and student exchange programs.

PYQ REFERENCE: (2023)

Q. Which organization has enacted the Nature Restoration Law (NRL) to tackle climate change and biodiversity loss?

- (a) The European Union**
- (b) The World Bank
- (c) The Organisation of Economic Cooperation and Development
- (d) FAO

Source:

<https://indianexpress.com/article/explained/explained-india-eu-strategic-agenda-10273658/>

120. Wassenaar Arrangement

120. With reference to the Wassenaar Arrangement, consider the following statements:

- I. It is a legally binding treaty that regulates global arms transfers.
- II. It aims to prevent the destabilizing accumulation of arms and dual-use goods.
- III. India became a member of the Wassenaar Arrangement in 2017.

Which of the statements given above is/are correct?

- (a) I, II and III
- (b) I only
- (c) II and III only
- (d) I and II only

Answer: (c) II and III only

Explanation:

In NEWS: The Wassenaar Arrangement: the need to reform export control regimes

The Wassenaar Arrangement:

● The Wassenaar Arrangement is a **multilateral agreement** that promotes **transparency and responsibility in the export of conventional arms and dual-use goods and technologies.**

Hence statement II is correct.

● It aims to prevent the destabilizing accumulation of these items, particularly by terrorists, by establishing common export control policies among its 42 participating states.

● **Operational since 1996**, the Arrangement is **not a legally binding treaty** but a political commitment where members exchange information on transfers and denials, share best practices, and work through consensus. **Hence statement I is incorrect.**

● **Purpose:** To ensure that the transfer of conventional arms and dual-use items (which can be used for both civilian and military purposes) does not contribute to destabilizing military capabilities or fall into the hands of terrorists.

● **Function:** It serves as an information exchange forum where participating states provide information on arms transfers, share insights on potential proliferation risks, and report on export license denials.

● **Structure:** The Arrangement operates through a Plenary meeting, where **decisions are made by consensus**, and a small **Secretariat based in Vienna, Austria.**

● **Scope:** It covers conventional arms, such as small arms and light weapons, military aircraft, and armored vehicles, as well as a wide range of dual-use goods and technologies.

● **Membership:** It includes 42 participating states, primarily from NATO and the European Union, with **India becoming the 42nd member in 2017.** **Hence statement III is correct.**

PYQ REFERENCE: (2022)

Q. Consider the following:

1. Asian Infrastructure Investment Bank
2. Missile Technology Control Regime
3. Shanghai Cooperation Organisation

India is a member of which of the above?

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

Source: <https://www.thehindu.com/sci-tech/technology/the-wassenaar-arrangement-the-need-to-reform-export-control-regimes/article70108613.ece>

121. 'Drone wall' project

121. 'Drone wall' project , sometimes seen in the news, is related to

- (a) A response to repeated airspace violations by drones, especially along the EU's eastern borders with Russia and Ukraine.
- (b) A European civilian infrastructure plan aimed at integrating drone technology into urban delivery systems across member states.
- (c) A collaborative project by EU nations to construct physical barriers and electronic fences along disputed land borders with neighboring countries.
- (d) A NATO-led military exercise involving the deployment of surveillance drones for maritime security operations in the Mediterranean Sea.

Answer: (a) A response to repeated airspace violations by drones, especially along the EU's eastern borders with Russia and Ukraine.

Explanation:

In NEWS: European defence ministers agree to press on with 'drone wall' project as airspace violations mount

'Drone wall' project:

- European defence ministers have agreed to move forward with a "drone wall" along borders with Russia and Ukraine to better detect, track, and intercept drones violating airspace.
- Recent incidents involving rogue drones, some blamed on Russia, have increased pressure on the EU and NATO to respond more decisively.
- The planned drone wall could take up to a year to build, and detailed technical and conceptual planning is underway among the member states.
- The priority will be deploying an effective detection system, with coordination among the defence industries of European states.

Purpose & Trigger Events

- The initiative is a response to repeated airspace violations by drones (and some manned aircraft), especially along the EU's

eastern borders with Russia and Ukraine. **Hence option (a) is correct.**

- Incidents include drones over Poland, fighter jets over Estonia, and disruptions at Danish airports.

Participants

- Defence ministers from at least 10 EU frontline countries are involved: Bulgaria, Denmark, Estonia, Finland, Latvia, Lithuania, Poland, Romania, Slovakia, Hungary.
- Ukraine is ready to join, sharing its experiences and technologies.
- NATO is involved as observer or partner in coordination.

Structure & Scope

- The project is part of a broader framework called “Eastern Flank Watch”. It has three components:
 - Drone Wall (air defence / detection & interception of unmanned threats)
 - Land Wall (traditional border protections on land)
 - Sea Wall (maritime border defence)
- The immediate priority is detection systems (radars, sensors, acoustic systems) followed by systems to intercept/neutralise malicious drones.

PYQ REFERENCE: (2016)

Q. 'Project Loon', sometimes seen in the news, is related to

- (a) waste management technology
- (b) wireless communication technology
- (c) solar power production technology
- (d) water conservation technology

Source:

<https://economictimes.indiatimes.com/news/defence/eurpean-defence-ministers-agree-to-press-on-with-drone-wall-project-as-airspace-violations-mount/articleshow/124164898.cms?from=mdr>

122. International Seabed Authority (ISA)

122. Consider the following statements:

Statement I: India is a member of the International Seabed Authority (ISA).

Statement II: As per UNCLOS Article 156(2), all States Parties to UNCLOS are automatically members of ISA.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: (a) Both Statement I and Statement II are correct and Statement II explains Statement I

Explanation:

In NEWS: India wins second mineral exploration contract in the Indian Ocean:

- India secured a second exploration contract from the International Seabed Authority (ISA) to explore Polymetallic Sulphides (PMS) in the Carlsberg Ridge (Indian Ocean), making India the largest holder of PMS exploration area globally.

Why It Matters:

- PMS are rich in copper, zinc, gold, silver, etc. — crucial for clean tech and electronics.
- Deep-sea resources help reduce dependence on imports and enhance mineral security.

Strategic Location:

- Carlsberg Ridge is near India (2°N), making exploration more accessible and strategically important.
- Known for hydrothermal vents — ideal for PMS deposits.

India's Readiness:

- Led by NCPOR, exploration begins in 2026 under the Deep Ocean Mission.
- Phased surveys using advanced tools (AUVs, ROVs, etc.).

Wider Impact:

- Strengthens India's Blue Economy ambitions.
- Enhances technological capability, strategic influence, and resource sustainability.

The International Seabed Authority (ISA):

● The International Seabed Authority (ISA) is an **autonomous international organization established under the 1982 UNCLOS and the 1994 Implementation Agreement.**

● ISA is responsible for organizing and regulating all mineral-related activities in the international seabed area (“The Area”) for the benefit of all humankind.

● ISA is mandated to ensure the protection of the marine environment from the harmful effects of deep-seabed activities.

● **Headquartered in Kingston, Jamaica**, ISA became operational on 16 November 1994, and fully autonomous by June 1996.

● As per UNCLOS Article 156(2), all States Parties to UNCLOS are automatically members of ISA. India is a member of UNCLOS and hence a member of the International Seabed Authority (ISA).

Hence both Statement I and Statement II are correct and Statement II explains Statement I.

● As of 2 September 2024, ISA has 170 members (169 countries + the European Union).

● The Area governed by ISA covers about 54% of the world's ocean floor and is designated as the common heritage of humankind.

PYQ REFERENCE: (2021)

Q. Consider the following statements:

1. The Global Ocean Commission grants licences for seabed exploration and mining in international waters.
2. India has received licences for seabed mineral exploration in international waters.
3. 'Rare earth minerals' are present on seafloor in international waters.

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

Source:

<https://indianexpress.com/article/explained/india-pms-exploration-carlsberg-ridge-indian-ocean-significance-10278691/>

GEOGRAPHY & MAPS

123. Bairabi-Sairang rail line

123. With reference to the Bairabi-Sairang rail line, consider the following statements:

1. It is a railway project aimed at improving connectivity in the northeastern state of Arunachal Pradesh.
2. The rail line connects Bairabi, in Assam, to Sairang, near Aizawl in Mizoram.
3. The project is part of the Indian government's initiative to enhance infrastructure under the Act East Policy.
4. It is a broad gauge electrified rail line that has been fully operational since 2020.

Which of the statements given above are correct?

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

Answer: C. 2 and 3 only

Explanation:

In NEWS: New Bairabi-Sairang rail line set to improve connectivity in Mizoram

Bairabi-Sairang rail line:

- The Bairabi-Sairang rail line is a key infrastructure project focused on enhancing connectivity in Mizoram **Hence Statement 1 is incorrect**
- It aims to link Sairang, located near the state capital Aizawl, with the existing railway network at Bairabi, thus integrating Mizoram with the wider Indian Railways system **Hence Statement 2 is correct**
- This project aligns with the government's Act East Policy, which prioritizes infrastructure development and improved connectivity in the Northeast to foster economic growth and strategic ties **Hence Statement 3 is correct**
- Moreover, due to Mizoram's rugged and hilly terrain, the construction involves complex engineering challenges such as the creation of multiple tunnels and bridges to traverse the difficult landscape **Hence Statement 4 is incorrect**
- Each of these statements accurately describes different facets of the project, confirming that all four statements are correct.

Source: <https://www.thehindu.com/news/national/with-bairabi-sairang-new-line-set-to-open-mizoram-expects-massive-changes-in-connectivity/article69996621.ece#:~:text=Mizoram%2C%20one%20of%20the%20seven,the%20second%20week%20of%20September.>

124. Total Lunar Eclipse

124. Consider the following statements about lunar eclipses:

1. A total lunar eclipse can be observed from any place on Earth where the Moon is above the horizon.
2. A lunar eclipse can last longer than a solar eclipse.
3. A lunar eclipse is more frequent than a solar eclipse.

Which of the above statements is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: Total lunar eclipse on night between September 7 and 8

Total Lunar Eclipse:

- A total lunar eclipse can indeed be observed from any part of Earth where the Moon is above the horizon, unlike a solar eclipse which has a narrow visibility path. **Hence Statement 1 is correct.**
- Although many students assume lunar eclipses are more frequent because more people can see them, in reality solar eclipses occur more frequently worldwide (2–5 per year) compared to 0–3 lunar eclipses. **Hence Statement 3 is incorrect.**
- Finally, a lunar eclipse can last for several hours, with totality itself reaching nearly 1 hour 40 minutes, whereas a total solar eclipse rarely exceeds 7.5 minutes, which makes **Statement 2 correct.**

PYQ REFERENCE: (2017)

Q. The terms 'Event Horizon', 'Singularity', 'String Theory' and 'Standard Model' are sometimes seen in the news in the context of

- (a) Observation and understanding of the Universe
 (b) Study of the solar and the lunar eclipses
 (c) Placing satellites in the orbit of the Earth
 (d) Origin and evolution of living organisms on the Earth

Source:

<https://www.thehindu.com/news/national/karnataka/total-lunar-eclipse-on-the-intervening-night-of-sept-7-and-8/article70008619.ece>

129. Operation Swarna

129. Operation SWARNA, recently in the news, aims to rescue, revive, and rejuvenate which among the following rivers?

- (a) Swarnamukhi River
- (b) Krishna River
- (c) Tungabhadra
- (d) Penna River

Answer: (a) Swarnamukhi River

Explanation:

In NEWS: TUDA moots Operation Swarna to rescue, revive, rejuvenate River Swarnamukhi

Operation Swarna:

● **Operation SWARNA** is a river rejuvenation initiative launched by the **Tirupati Urban Development Authority (TUDA)** in **Andhra Pradesh**.

● It aims to **rescue, revive, and rejuvenate** the **Swarnamukhi River**, which flows through the temple town of **Tirupati** and nearby regions. **Hence option (a) is correct.**

● The acronym **SWARNA** stands for **Swarnamukhi Waterbody Action for River and Nala Awareness**.

● The river originates in the **Eastern Ghats** near **Pakala** and flows eastwards into the **Bay of Bengal**, covering a length of approximately **130 km**.

● Key features of Operation SWARNA include:

- **Drone surveys** to scientifically map the river's natural course
- Creation of a **50-meter buffer zone** on both sides of the river
- **Eviction of encroachments** along the riverbanks
- Formation of a **dedicated task force** with legal powers to act against violators

● The task force under TUDA will have enforcement powers **similar to HYDRAA (Hyderabad Revenue and Demolition Authority)**.

● The operation focuses on both **ecological conservation** and **civic responsibility**, aiming to restore the river's original width, prevent flooding, and promote sustainable development.

● Operation SWARNA is aligned with broader environmental goals, including **urban river rejuvenation, flood mitigation, and community-led water conservation**.

PYQ REFERENCE: (2024)

Q. Operations undertaken by the Army towards upliftment of the local population in remote areas to include addressing of their basic needs is called:

- (a) Operation Sankalp
- (b) Operation Maitri
- (c) Operation Sadbhavana
- (d) Operation Madad

Source:

<https://www.thehindu.com/news/national/andhra-pradesh/tuda-moots-operation-swarna-to-rescue-revive-rejuvenate-river-swarnamukhi/article69999538.ece>

130. Blood moon

130. Consider the following statements with respect to the **Blood Moon**:

1. It occurs during a total solar eclipse.
2. It is caused by the refraction of sunlight through Earth's atmosphere.
3. Blood moons are visible only from the polar regions of the earth.

Which of the statements given above is/are correct?

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

Answer: (b) 2 only

Explanation:

In NEWS: Total lunar eclipse enthralled skywatchers; clouds play spoilsport

Blood Moon:

● A **Blood Moon** refers to the reddish appearance of the Moon during a **total lunar eclipse**. **Hence statement 1 is incorrect.**

● It is not an astronomical term, but a popular term used to describe the color change observed during the eclipse.

● During a total lunar eclipse, the **Earth comes between the Sun and the Moon**.

● The Earth's atmosphere **scatters shorter wavelengths (blue)** of sunlight and **bends red/orange wavelengths** toward the Moon.

● This **refracted** reddish light illuminates the Moon, giving it a copper or blood-red hue. **Hence statement 2 is correct.**

Scientific Explanation

● Based on Rayleigh scattering (same phenomenon responsible for red sunsets).

● The degree of redness depends on:

- Atmospheric dust
- Pollution
- Volcanic ash
- Cloud cover on Earth

Visibility

● Blood moons are **visible from anywhere on Earth** where the eclipse is occurring during local nighttime. **Hence statement 3 is incorrect.**

● Typically occurs once **every 2.5 years** on average.

PYQ REFERENCE: (2024)

Q. On June 21 every year, which of the following latitude(s) experience(s) a sunlight of more than 12 hours?

1. Equator
2. Tropic of Cancer
3. Tropic of Capricorn
4. Arctic Circle

Select the correct answer using the code given below:

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

Source: <https://www.thehindu.com/news/national/lunar-eclipse-2025-india-to-witness-blood-moon-today-know-time-precautions-and-other-details/article70022035.ece>

131. Lightning strikes

131. Consider the following statements:

Statement-I : Lightning is recognized as a national-level natural disaster in India and covered under the central State Disaster Response Fund (SDRF).

Statement-II : Lightning is responsible for 33% of natural disaster deaths in India.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement II is correct

Answer: (d) Statement-I is incorrect, but Statement II is correct

Explanation:

In NEWS: As lightning strikes rise in Jharkhand, its poor and marginalised tribal communities are most at risk

Lightning:

- Lightning is a sudden electrostatic discharge caused by the buildup of electrical charges in clouds.
- It occurs when oppositely charged particles in the cloud and ground (or within clouds) create a strong electric field.
- When the electrical potential exceeds a threshold, a high-voltage discharge occurs, visible as a lightning bolt.
- Most lightning occurs within clouds, but cloud-to-ground strikes are the most dangerous.
- The discharge rapidly heats the air to about 30,000°C, causing it to expand explosively — this creates thunder.
- Lightning commonly occurs during thunderstorms, especially in hot and humid conditions.
- It is a natural but highly dangerous phenomenon, often causing fatalities, fires, and damage

Lightning Risk in Jharkhand's Tribal and Rural Communities

- Over the past decade, 1,669 people have died due to lightning strikes in Jharkhand, highlighting a persistent and grave risk.
- The majority of victims are small farmers and members of tribal communities, who work in open fields and hilly terrain, often under tall trees that increase their exposure.
- Jharkhand is one of six highly vulnerable states as per the India Meteorological Department and CROPC.

- Although lightning conductors were installed in schools and public buildings, they are often stolen or non-functional. Many rural schools lack adequate protection.

- The state government provides compensation—₹4 lakh for fatalities and up to ₹2 lakh for injuries—but this does little to restore livelihoods or emotional loss, particularly as most victims were sole earners.

- Though warning systems like the Mausam, Meghdoot, and Damini apps exist, awareness remains low, especially in remote areas lacking mobile connectivity or where people don't carry phones to work

Lightning - protection in India:

- Lightning is responsible for 33% of natural disaster deaths nationwide. **Hence statement II is correct.**

- However, lightning is not recognized as a national-level natural disaster in India, and thus is not covered under the central State Disaster Response Fund (SDRF). **Hence statement I is incorrect.**

- Presently, lightning-related deaths are categorized as "accidental deaths" by the National Crime Records Bureau (NCRB), not as a disaster

- Despite repeated demands by states like Bihar, West Bengal, and Odisha to classify lightning as a natural disaster (which would enable compensation via SDRF), the Central government has declined, citing the potential to prevent such deaths through awareness programs instead

- At the state level, some governments have declared lightning as a "state-specific disaster", allowing them to provide ex-gratia support

Impacts of Lightning:

- Lightning causes thousands of deaths in India annually, especially among farmers and rural workers.

- Survivors often suffer from severe burns, neurological injuries, or long-term disabilities.

- Lightning strikes destroy homes, schools, and public infrastructure, particularly in poorly protected rural areas.

- Electrical equipment and power lines are frequently damaged during thunderstorms.

- Livestock losses are common, affecting the livelihoods of tribal and farming communities.

- Lightning can spark forest fires, leading to environmental degradation and biodiversity loss.

- Affected families experience emotional trauma and financial hardship due to sudden loss of earning members.

PYQ REFERENCE: (2013)

Q. During the thunderstorm, the thunder in the skies is produced by the

1. meeting of cumulonimbus clouds in the sky
2. lightning that separates the nimbus clouds
3. violent upward movement of air and water particles

Select the correct answer using the codes given below.

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

Source: <https://www.downtoearth.org.in/natural-disasters/as-lightning-strikes-rise-in-jharkhand-its-poor-and-marginalised-tribal-communities-are-most-at-risk>

132. Punjab Floods

132. Consider the following:

1. Obstructed drainage due to unplanned urban development
2. Paddy cultivation during the monsoon season
3. Efficient groundwater recharge techniques
4. Ill-timed dam water release

Which of the above factors are responsible for worsening floods?

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

Answer: (b) 1, 2, and 4

Explanation:

In NEWS: Explained: Why Punjab keeps flooding

Why Punjab keeps flooding:

Natural Factors

● **Geography:** Punjab, often termed the “land of five rivers,” is naturally flood-prone due to its location in the Indo-Gangetic Plain, where multiple rivers converge.

● **Monsoon Rains:** Intense and prolonged monsoon rains, especially in upstream regions like Himachal Pradesh and Jammu & Kashmir, lead to the swelling of rivers such as the Sutlej, Beas, Ravi, and seasonal streams like the Ghaggar.

Human-Induced Factors

● **Obstructed Drainage:** Urban development has led to the construction of highways and culverts without adequate drainage systems, causing water stagnation in both rural and urban areas.

● **Dam Management:** Ill-timed releases from dams, sometimes without proper coordination, exacerbate downstream flooding.

● **Agricultural Practices:** The adoption of paddy cultivation, especially during the monsoon, increases water usage and hampers groundwater recharge, making the region more susceptible to flooding.

Hence statements 1, 2, and 4 are correct.

Note: Efficient groundwater recharge helps mitigate floods, not worsen them. **Hence statement 3 is incorrect.**

PYQ REFERENCE: (2013)

Q. Contour bunding is a method of soil conservation used in

- (a) Desert margins, liable to strong wind action
- (b) Low flat plains, close to stream courses, liable to flooding
- (c) Scrublands, liable to spread of weed growth
- (d) None of the above

Source: <https://indianexpress.com/article/explained/why-punjab-keeps-flooding-10232974/>

133. Great Nicobar project

133. Consider the following statements:

1. The ten-degree channel separates the Andaman Islands from the Nicobar Islands.
2. The Great Nicobar Island is close to the Six Degree Channel, a critical maritime route through which a major portion of global trade passes.
3. The only active volcano in India, Barren Island, is located in the Andaman Sea.
4. There are five Particularly Vulnerable Tribal Groups (PVTGs) in the Andaman and Nicobar Islands.
5. Andaman and Nicobar Islands have a unique combination of mangrove forests along the coast, tropical evergreen forests inland, and patches of moist deciduous forests.

How many of the above statements are correct?

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

Answer: (d) All five

Explanation:

In NEWS: Great Nicobar project will displace tribal communities, threaten their survival

The Great Nicobar Connectivity Project:

● The Great Nicobar Connectivity Project is a major infrastructure initiative undertaken by the Government of India to enhance strategic, economic, and ecological presence in the Great Nicobar Island, the southernmost part of the Andaman and Nicobar Islands.

● The project is part of India's broader efforts to strengthen its position in the Indian Ocean Region and improve connectivity in remote areas.

Key Components of the Project

International Container Transshipment Terminal (ICTT)

- A deep-sea port to be developed at Galathea Bay.
- Aims to compete with ports like Singapore, Colombo, and Klang.

Greenfield Airport

- Designed for both military and civilian use.
- Will support wide-body aircraft operations.
- Will improve connectivity to the island and support tourism.

Power Plant

- A 450 MVA power plant to ensure electricity supply for the entire project and local areas.

Township Development

- A new smart city-style township to support the expected influx of population and workforce.
- Includes housing, public infrastructure, and commercial areas.

Strategic Importance

- **Geo-strategic Location:** Close to the Six Degree Channel, a critical maritime route through which a major portion of global trade passes. The Six Degree Channel is a narrow maritime

passage located in the Indian Ocean, between the Great Nicobar Island (India) and Indonesia's Sumatra Island. **Hence statement 2 is correct.**

- **Boosting Maritime Security:** Helps India monitor and secure sea lanes in the Indo-Pacific.
- **Regional Competition:** Counters China's presence in the Indian Ocean (especially via its String of Pearls strategy).

Andaman and Nicobar Islands:

- The Andaman and Nicobar Islands are a group of 572 islands, located in the Bay of Bengal.
- They are divided into two main groups: the Andaman Islands (north) and the Nicobar Islands (south).
- The capital of the Union Territory is Port Blair, located in South Andaman.
- The ten-degree channel separates the Andaman Islands from the Nicobar Islands. **Hence statement 1 is correct.**
- These islands are of volcanic and sedimentary origin, and are part of a submarine mountain range extending from the Arakan Yoma range of Myanmar.
- The only active volcano in India, Barren Island, is located in the Andaman Sea. **Hence statement 3 is correct.**
- The islands are covered with dense tropical rainforests and are rich in biodiversity.
- Andaman and Nicobar Islands have a unique combination of mangrove forests along the coast, tropical evergreen forests inland, and patches of moist deciduous forests. **Hence statement 5 is correct.**
- The region falls in seismic Zone V, making it highly prone to earthquakes and tsunamis.
- There are five Particularly Vulnerable Tribal Groups (PVTGs) in the Andaman and Nicobar Islands. The five PVTGs are the Great Andamanese, Onges, Jarwas, Sentinelese, and Shompens. **Hence statement 4 is correct.**

PYQ REFERENCE:

Q. Which one of the following pairs of islands is separated from each other by the 'Ten Degree Channel'? (2014)

- (a) Andaman and Nicobar
- (b) Nicobar and Sumatra
- (c) Maldives and Lakshadweep
- (d) Sumatra and Java

Q. Between India and east Asia, the navigation-time and distance can be greatly reduced by which of the following? (2011)

1. Deepening the Malacca straits between Malaysia and Indonesia.
2. Opening a new canal across the Kra isthmus between the Gulf of Siam and Andaman sea.

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

Source: <https://www.thehindu.com/news/national/great-nicobar-project-will-displace-tribal-communities-threaten-their-survival-jairam-ramesh/article70055427.ece>

134. Offshore Aquifers

134. Which of the following factors help freshwater persist beneath the seafloor in offshore aquifers?

1. Density contrast between freshwater and seawater
2. Presence of impermeable cap rocks
3. Continuous recharge from ocean water
4. Original recharge during past glacial periods

Select the correct answer using the code below:

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

Answer: (b) 1, 2 and 4 only

Explanation:

In NEWS: Scientists have confirmed a large freshwater aquifer beneath the sea floor off the northeast U.S. coast (New Jersey to Maine).: What are offshore aquifers and why are they significant?

Offshore aquifers:

- Offshore aquifers are like terrestrial aquifers in that they are porous rocks or sediments saturated with freshwater—but located under the seafloor.
- It is estimated that offshore aquifers might extend up to ~90 km offshore, and that globally they may contain about 1 million cubic kilometres of freshwater—roughly 10% of all terrestrial fresh groundwater.
- How did that freshwater get there? There are two main hypotheses:
 - During past ice ages (when sea levels were lower), those areas now underwater were dry land, so rainfall could infiltrate and recharge aquifers that now lie under the sea.
 - There may be connections with onshore aquifers that continue to feed freshwater into the offshore portions.
- A “cap rock” or impermeable clay-rich sediment layer may prevent mixing of freshwater and saltwater, keeping the freshwater “locked in.” **Hence 2 is correct.**
- Extracting water from these offshore aquifers is expensive and difficult. One estimate for such a drilling effort cost ~\$25 million.
- Other challenges include designing wells under the seafloor, transporting the water to land, avoiding saltwater intrusion (i.e. mixing with seawater), ecological impacts, and disputes over ownership / rights among coastal communities. **Hence 3 is incorrect.**

How Freshwater Can Persist Under the Sea:

- **Density contrast:** Freshwater is less dense than saltwater. If a low-permeability “cap” (such as clay layers) exists, it can prevent upward mixing or infiltration of seawater into the freshwater zone. **Hence 1 is correct.**
- **Original recharge / relict water:** Much of the water might be “relict”—i.e. it moved in when the area was above sea level (during glacial / low sea-level periods) and remained trapped as sea levels rose. **Hence 4 is correct.**

- Geological structure: Porous sediments or rocks, faulting, fractures, and connectivity (or lack thereof) influence how water moves or is confined.
- Submarine groundwater discharge: Fresh or brackish groundwater may slowly flow from land into the sea (i.e. submarine groundwater discharge), though this is usually closer to shore and in shallower sediments.

PYQ REFERENCE: (2025)

Q. Consider the following statements:

Statement I: In the context of the effect of water on rocks, chalk is known as a very permeable rock whereas clay is known as quite an impermeable or least permeable rock.

Statement II: Chalk is porous and hence can absorb water.

Statement III: Clay is not at all porous.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
 (b) Both Statement II and Statement III are correct but only one of them explains Statement I
 (c) Only one of the Statements II and III is correct and that explains Statement I
 (d) Neither Statement II nor Statement III is correct

Source:

<https://indianexpress.com/article/explained/explained-sci-tech/freshwater-sea-floor-offshore-aquifers-10239958/>

ART AND CULTURE

135. Ramon Magsaysay Award

135. Consider the following statements about the Ramon Magsaysay Award:

1. It was established in 1957 by the United Nations Development Programme (UNDP).
2. It is administered by the Ramon Magsaysay Award Foundation in Manila.
3. It is often referred to as the "Nobel Prize of Asia."

Which of the above statements is/are correct?

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

Answer: (b) 2 and 3 only

In NEWS: NGO Educate Girls wins Ramon Magsaysay Award

About the Ramon Magsaysay Award:

- Established in 1957 by the Rockefeller Brothers Fund.
- Named after Ramon Magsaysay, 7th President of the Philippines.
- Administered by the Ramon Magsaysay Award Foundation, Manila.
- Known as the "Nobel Prize of Asia."

- Awarded for selfless service, integrity, and transformative leadership.

Categories (historical)

- Government service.
- Public service.
- Community leadership.
- Journalism, literature, creative arts, and communication.
- Peace and international understanding.
- Emergent leadership.

(Now awarded broadly, not category-bound.)

Notable Indian Recipients

- Vinoba Bhave (1958) – Bhoodan Movement.
- Mother Teresa (1962) – Humanitarian service.
- Jayaprakash Narayan (1965) – Community leadership.
- Kiran Bedi (1994) – Police reforms.
- Aruna Roy (2000) – RTI movement.
- Arvind Kejriwal (2006) – RTI activism.
- 2018 – Bharat Vatwani (mental health), Sonam Wangchuk (education).
- 2019 – Ravish Kumar (journalism).

PYQ REFERENCE:

Q. Who amongst the following are members of the Jury to select the recipient of 'Gandhi Peace Prize'?

- I. The President of India
- II. The Prime Minister of India
- III. The Chief Justice of India
- IV. The Leader of Opposition in the Lok Sabha

Select the correct answer using the code given below.

- (a) II and IV only
 (b) I, II and III
 (c) II, III and IV
 (d) I and III only

Source:

<https://www.thehindu.com/news/national/magsaysay-award-for-educate-girls-a-historic-moment-for-india-non-profits-founder-safeena-husain/article69996543.ece>

136. Daruma Doll

136. The Daruma Doll, often seen in Japanese culture, is associated with which of the following?

- (a) Bodhidharma, founder of Zen Buddhism
 (b) Confucius, founder of Confucianism
 (c) Laozi, founder of Taoism
 (d) Nichiren, founder of Nichiren Buddhism

Answer: (a) Bodhidharma, founder of Zen Buddhism

In NEWS: PM Modi Receives Daruma Doll From Japan Priest: Meaning Behind The Symbol Explained



About Daruma Doll

- The Daruma doll is a traditional Japanese talisman of perseverance and good luck.
- It is modeled after Bodhidharma, the Buddhist monk who founded Zen Buddhism.
- Typically made of papier-mâché, hollow, and weighted at the bottom so it returns upright when tilted ("Okiagari" effect – symbolizing resilience).

Appearance & Symbolism

- Usually round-shaped, painted in red, though other colors also exist.
- Eyes: Initially blank. One eye is painted when a goal is set; the other eye is painted once the goal is achieved.
- Represents: Perseverance, resilience, good fortune, goal-setting, and success.
- Often inscribed with Japanese characters like "fuku" (good fortune) or "shōfuku" (bringing happiness).

Cultural Context

- Popular in New Year celebrations in Japan, when people set new goals.
- Considered a lucky charm for businesses, students, and politicians.
- Sold in temples (especially in Takasaki city, Japan, known as the birthplace of Daruma dolls).

Significance

- A symbol of the Japanese proverb: "Nanakorobi yaoki" → "Fall seven times, stand up eight."
- Encourages persistence despite difficulties.
- Today, it is also seen as a cultural souvenir representing Japanese identity.

PYQ REFERENCE:

Q. Sanghabhuti, an Indian Buddhist monk, who travelled to China at the end of the fourth century AD, was the author of a commentary on:

- (a) Prajnaparamita Sutra
- (b) Visuddhimagga
- (c) Sarvastivada Vinaya Sain**
- (d) Lalitavistara

Source: <https://indianexpress.com/article/lifestyle/art-and-culture/prime-minister-narendra-modi-daruma-doll-trip-japan-history-significance-10218710/>

137. SALWA JUDUM

137. With reference to Salwa Judum, consider the following statements:

1. It was a government-sponsored militia movement aimed at countering Naxalite insurgency in Chhattisgarh.
2. The Supreme Court of India declared the deployment of tribal youth as Special Police Officers (SPOs) under Salwa Judum unconstitutional.
3. Salwa Judum was initiated and led by the Central Reserve Police Force (CRPF).

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: A look at rise and fall of Salwa Judum amid Amit Shah's Naxalism barb at Oppn's Vice-President candidate

SALWA JUDUM:

- Salwa Judum was an **anti-Naxalite movement** that began in 2005 in the Bastar region of Chhattisgarh, purportedly as a "people's resistance movement" against Maoist insurgents. **Hence statement 1 is correct.**
- It involved the mobilization of tribal youth, many of whom were appointed as Special Police Officers (SPOs), and operated with the support of the state government. While initially portrayed as a grassroots initiative, it was later revealed to have state sponsorship, with active assistance from local police and security forces.
- The movement quickly became controversial due to widespread allegations of human rights violations, forced displacements, and violence against civilians.
- In 2011, the Supreme Court of India declared the deployment of tribal youth as SPOs under **Salwa Judum to be unconstitutional, citing violations of Articles 14 and 21 of the Constitution. Hence statement 2 is correct.**
- The Court also ordered the disbandment of the SPOs and directed the state to stop funding such groups.
- While Salwa Judum was **not initiated or led by the Central Reserve Police Force (CRPF)**, central paramilitary forces were involved in coordinated operations alongside state-backed groups. **Hence statement 3 is incorrect.**
- The Salwa Judum episode raises important questions about the balance between internal security measures and constitutional rights, especially in conflict-prone tribal regions.

PYQ REFERENCE: (2021)

Q. Consider the following pairs:

	Movement/Organization	Leader
1	All India Anti-Untouchability League	Mahatma Gandhi
2	All India Kisan Sabha	Swami Sahajanand Saraswati
3	Self-Respect Movement	E.V. Ramaswami Naicker

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

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

Source: <https://indianexpress.com/article/political-pulse/salwa-judum-amit-shah-naxalism-barb-oppn-vice-president-10206982/>

138. Vrindavani Vastra

138. With reference to the traditional textile Vrindavani Vastra, consider the following statements:

- Vrindavani Vastra originated in Assam during the 16th century under the patronage of the saint-scholar Srimanta Sankardev.
- It is a type of handwoven silk textile that narrates episodes from the life of Lord Krishna, particularly his childhood in Vrindavan.
- The weaving technique of Vrindavani Vastra is closely related to the Kalamkari art form of South India.

Which of the statements given above is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: Vrindavani Vastra to return from British Museum for 2027 exhibition

Vrindavani Vastra:

- **Vrindavani Vastra** is one of the most significant traditional textiles of India, originating in **Assam during the 16th century**. It was created under the spiritual and cultural patronage of Srimanta Sankardev, a saint-scholar, reformer, and key figure of the Bhakti Movement in Assam. **Thus, Statement 1 is correct.**
- The textile was woven by his disciple Madhavdev and other weavers using the indigenous weaving techniques of Assam.
- The textile is made of silk and is notable for its narrative quality, as it depicts episodes from the life of Lord Krishna, **particularly his playful Leelas in Vrindavan**. Its panels often show Krishna dancing with gopis, playing the flute, or lifting Govardhan hill. This religious and cultural significance makes it

more than just a fabric; it is considered a visual scripture of the Vaishnavite tradition. **Hence, Statement 2 is also correct.**

- However, the claim that its weaving technique is related to Kalamkari is inaccurate. Kalamkari is a painted or block-printed textile from Andhra Pradesh and Telangana, whereas Vrindavani Vastra is purely a **woven silk art form of Assam**. Therefore, **Statement 3 is incorrect.**

PYQ REFERENCE: (2015)

Q. Kalamkari painting refers to

- (a) a hand-painted cotton textile in South India
(b) a handmade drawing on bamboo handicrafts in North-East India
(c) a block-painted woollen cloth in Western Himalayan region of India
(d) a hand-painted decorative silk cloth in North-Western India

Source: <https://www.gktoday.in/vrindavani-vastra-textile/>

139. Savitribai Phule

139. Consider the following statements about Savitribai Phule:

- She's acclaimed as the first female teacher of modern India
- Savitribai founded the Balhatya Pratibandhak Griha in 1863 and also co-founded the Satyashodhak Samaj in 1873

Which of the statements given above is/are correct?

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

Answer: (c) Both 1 and II

Explanation:

In NEWS: PM shares an article on the remarkable contributions of Savitribai Phule

Savitribai Phule:

- Savitribai Phule (3 January 1831 – 10 March 1897) emerged as a trailblazing educator, social reformer, and poet in 19th-century Maharashtra.
- She's acclaimed as the **first female teacher of modern India** and a forerunner of the feminist movement in the country. **Hence statement I is correct.**
- Born in Naigaon village, Satara District, Maharashtra, she came from the Mali community and was married to Jyotirao Phule at a young age.
- Jyotirao Phule taught Savitribai to read and write. She received formal teacher training at institutions in Ahmednagar and Poona (Pune), becoming a qualified educator around 1847.
- In 1848, Savitribai and her husband founded the **first indigenous school for girls** in Bhide Wada, Pune.
- Together, they expanded their efforts, running up to 18 schools for girls from marginalized castes by 1851, supported with stipends to reduce dropout rates.
- Savitribai founded the **Balhatya Pratibandhak Griha in 1863** to shelter widows, child brides, and destitute women, and she championed widow remarriage, inter-caste unions, and fought against child marriage, female infanticide, and sati.

● Alongside Jyotirao, she **co-founded the Satyashodhak Samaj** (Truth-seekers' Society) in 1873. She led its women's wing in promoting equality for women, peasants, and Dalits. **Hence statement II is correct.**

● Her education initiatives encountered strong societal resistance, including verbal abuse and threats from orthodox sections of society. Even her father-in-law expelled the couple from their home.

● Savitribai's legacy resonates today as a beacon for women's empowerment, gender equality, and social justice. Her pioneering work continues to inspire modern reforms and feminist discourse.

● The prestigious Savitribai Phule Pune University (formerly the University of Pune) was renamed in her honor in 2014.

● A 2025 biographical film titled "Phule", directed by Anant Mahadevan, portrays the lives and reform efforts of Jyotirao and Savitribai.

PYQ REFERENCE: (2025)

Q. Consider the following statements about Raja Ram Mohan Roy:

- I. He possessed great love and respect for the traditional philosophical systems of the East.
- II. He desired his countrymen to accept the rational and scientific approach and the principle of human dignity and social equality of all men and women.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both 1 and II**
- (d) Neither I nor II

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2164214>

140. Self-Respect Movement

140. Which of the following are the core objectives of the Self-Respect Movement?

1. Promotion of atheism
2. Campaign against Brahminical dominance
3. Advocacy of Sanskritization
4. Support for women's rights

Select the correct answer using the code below:

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

Answer: (a) 1, 2 and 4 only

Explanation:

In NEWS: Looking back at 100 years of the Self-Respect Movement in Tamil Nadu

The Self-Respect Movement

● The Self-Respect Movement was a powerful social reform movement launched in 1925 in Tamil Nadu (then Madras Presidency), India, by Periyar E.V. Ramasamy. It played a pivotal role in challenging caste hierarchy, patriarchy, and the dominance of Brahmins in South Indian society.

Core Objectives of the Self-Respect Movement

- Eradication of **caste-based discrimination**, particularly against non-Brahmins and Dalits.
- Promotion of **rationalism, atheism, and self-respect** among oppressed communities.
- **Abolition of the concept of hereditary priesthood**, and religious rituals that reinforced caste.
- Advocacy for **women's rights**, including widow remarriage, right to education, and property rights.
- Opposition to **child marriage, dowry, and superstitions**.
- Promotion of Dravidian identity and anti-North Indian domination (especially anti-Hindi stance). **Hence statements 1, 2 and 4 only are correct.**

Impact and Legacy

- **Foundation for the Dravidian Movement:** The Self-Respect Movement laid the ideological groundwork for political parties like Dravida Munnetra Kazhagam (DMK) and AIADMK.
- **Cultural revolution:** Encouraged people to drop caste names, challenge Brahminical rituals, and organize self-respect marriages (without priests or religious rites).
- **Legal changes:** Influenced Tamil Nadu's progressive laws on marriage, property rights, and reservation policies.
- **Continued relevance:** Its legacy continues in Tamil Nadu's politics, social structure, and cultural identity.

PYQ REFERENCE: (2025)

Q. Who among the following was the founder of the 'Self-Respect Movement'?

- (a) Periyar E. V. Ramaswamy Naicker**
- (b) Dr. B. R. Ambedkar
- (c) Bhaskarrao Jadhav
- (d) Dinkarrao Javalkar

Source: <https://www.thehindu.com/news/national/tamil-nadu/a-100-years-of-the-self-respect-movement-in-tamil-nadu/article70006894.ece>

141. Langkhon festival

Q. The langkhon festival is celebrated by the

- (a) Khasis of Meghalaya
- (b) Tiwas of Assam
- (c) Apatanis of Arunachal Pradesh
- (d) Nagas of Nagaland

Answer: (b) Tiwas of Assam

Explanation:

In NEWS: Tiwa tribesmen celebrate Langkhun festival in Umsowai village in Karbi Anglong district of Assam

The Langkhon Festival:

● The Langkhon Festival is a pre-harvest festival celebrated by the Tiwa tribe in the Karbi Anglong district of Assam. **Hence option (b) is correct.**

● It usually occurs during the Ahin and Kati seasons, corresponding to October–November, though the exact dates can vary each year

● The festival centers around worshipping deities such as Ramsa Devota (also referenced as Ramcha God) and Mother Bijuli, seeking protection for their paddy crops from pests and invoking blessings for a good harvest, healthy families, and overall prosperity.

● During the festival, farmers engage in traditional dances and rituals to pray for a bountiful harvest, with the festival also serving to strengthen the community's cultural and traditional ties.

● Farmers perform traditional dances and rituals during the event.

Tribal communion



Traditional fete: Tiwa tribesmen celebrate Langkhun festival in Umsowai village in Karbi Anglong district of Assam on Tuesday. The Tiwa Langkhun festival has great cultural significance and the community prays for a good harvest. RITU RAJ KONWAR

The Tiwa tribe:

● The Tiwa tribe (also known as Lalung) is one of the indigenous tribes of Northeast India, primarily inhabiting parts of Assam and Meghalaya, with some presence in Arunachal Pradesh, Nagaland, and Manipur.

● They are recognized as a Scheduled Tribe (Plains & Hills) under the Constitution of India

● They have a rich cultural heritage, distinct language, and unique traditions.

● They speak Tiwa language, part of the Tibeto-Burman language family

● Traditionally follow a village council system led by a chief or "Loro"

● Have clan-based society, practicing endogamy within tribes but exogamy within clans

● Religion & Beliefs

○ Traditionally animists, worshipping nature, spirits, and ancestors

○ Many have adopted Hinduism over time, especially in the plains

○ Hill Tiwas still retain strong indigenous animistic practices

● Festivals & Cultural Practices - Langkhon Festival, Wanchuwa Festival, Pisu or Pisu-Dima, Jonbeel Mela

● Wanshuwa and Langkhon dances are popular - Performed during festivals using traditional instruments.

PYQ REFERENCE:

Q. Consider the following pairs: (2018)

Tradition	— State
1. Chapchar Kut Festival	— Mizoram
2. Khongjom Parba ballad	— Manipur
3. Thang-Ta Dance	— Sikkim

Which of the pairs given above is/are correct?

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

Consider the following pairs: (2017)

Traditions	Communities
1. Chaliha Sahib Festival	Sindhis
2. Nanda Raj Jaat Yatra	Gonds
3. Wari-Warkari	Santhals

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

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

Source: THE HINDU

142. Women's Hockey Team wins Silver Medal

142. Consider the following statements:

- I. The Women's Hockey Asia Cup 2025 was held in Hangzhou, China.
- II. In the Women's Hockey Asia Cup 2025, India won the gold medal.
- III. Udita Duhan from India was awarded the best player of the tournament.

Which of the statements above is/are correct?

- (a) I only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (c) I and III only

Explanation:

In NEWS: Prime Minister congratulates Indian Women's Hockey Team on Asia Cup Silver Medal

Women's Asia Cup 2025 - Hockey:

● In the Women's Asia Cup 2025 held in Hangzhou, China, India reached the final but lost 1–4 to the host nation, China and backed the Silver medal. **Hence statement I is correct and II is incorrect.**

● This silver medal is a strong show from India, demonstrating their consistency and competitiveness in Asian women's hockey.

- However, the loss means missing out on direct qualification for the next Women's Hockey World Cup. China's win secured them direct entry.
- The 2025 edition featured 8 national teams from across Asia.
- Individual Awards
 - Top Scorer: Zou Meirong (China) – 11 goals
 - Best Player: Udit Duhan (India). **Hence statement III is correct.**

Final Standings:

- 🏆 China – Champions (Qualified for 2026 World Cup)
- 🥈 India – Silver Medal
- 🥉 Japan – Bronze Medal

PYQ REFERENCE:

Q. Consider the following statements in respect of the first Kho-Kho World Cup:

- The event was held in Delhi, India.
- Indian men beat Nepal with a score of 78-40 in the final to become the World Champion in the men category.
- Indian women beat Nepal with a score of 54—36 in the final to become the World Champion in women category.

Which of the statements above is/are correct?

- (a) I only
(b) II and III only
(c) I and III only
(d) I, II and III

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2166616>

143. Sir M. Visvesvaraya

143. With reference to Sir Mokshagundam Visvesvaraya, consider the following statements:

1. He was the chief engineer responsible for the construction of the Krishna Raja Sagara dam in Karnataka.
2. He served as the Diwan of Mysore and introduced compulsory primary education in the state.
3. He was awarded the Bharat Ratna for his contributions to public administration and engineering.
4. He proposed the "Visvesvaraya Plan" in 1934 for India's economic development.

Which of the statements given above is/are correct?

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

Answer: (c) 1, 2, 3 and 4

Explanation:

In NEWS: Prime Minister pays tribute to Sir M. Visvesvaraya on Engineers' Day

Contributions of Sir M. Visvesvaraya:

- Sir Mokshagundam Visvesvaraya was a renowned Indian engineer, scholar, and statesman, popularly known as the "Father of Modern Mysore."
- He was the chief engineer responsible for the design and construction of the Krishna Raja Sagara (KRS) dam in Karnataka, a major irrigation project. **Hence statement 1 is correct.**
- Visvesvaraya introduced an innovative flood protection system for Hyderabad after the devastating Musi River floods of 1908.
- He served as the Diwan of Mysore from 1912 to 1918, during which he implemented wide-ranging reforms in industry, education, and infrastructure. **Hence statement 2 is correct.**
- Under his leadership, the Mysore government promoted industrialization, establishing many public sector enterprises, including the Mysore Soap Factory and Mysore Iron Works.
- He pioneered the concept of planned economic development and scientific management in Indian administration.
- Visvesvaraya was awarded the Bharat Ratna in 1955 for his exceptional service to the nation. **Hence statement 3 is correct.**
- He advocated for compulsory primary education and established technical institutions to promote engineering and scientific education.
- His birthday, 15th September, is celebrated as Engineers' Day in India in his honor.
- Visvesvaraya's writings and lectures inspired generations of engineers and policymakers in India.

"Visvesvaraya Plan" :

- The "Visvesvaraya Plan," or Planned Economy for India, was a 1934 proposal by Sir M. Visvesvaraya, a prominent engineer and economist, for India's economic development. **Hence statement 4 is correct.**
- It advocated for democratic capitalism, a shift of labor from agriculture to industrialization, and aimed to double national income in a decade.
- Though the British government didn't act on it, the plan "stirred an urge for national planning" and is considered the first blueprint for economic planning in India.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2166651>

144. Operation Polo

144. With reference to Operation Polo (1948), consider the following statements:

1. It was a military action by the Indian Army to integrate the princely state of Jammu & Kashmir into the Indian Union.
2. The operation lasted five days for annexation and was termed a "Police Action"
3. The operation was commanded by Major General J.N. Chaudhuri.

Which of the above statements is/are correct?

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

Answer: (b) 2 and 3 only

Explanation:

In NEWS: Why Operation Polo was launched to take over Hyderabad, 77 years ago

Operation Polo (1948):

1. After Independence, princely states had the option to **join India, Pakistan, or remain independent.**
2. **Hyderabad State**, ruled by **Nizam Mir Osman Ali Khan**, wanted to remain independent. **Hence statement 1 is incorrect.**
3. **Demographics:** Majority Hindu population (~85%), minority Muslim ruling elite.
4. In **November 1947**, Hyderabad signed a **Standstill Agreement** with India to maintain status quo for one year.
5. The Nizam delayed integration talks and secretly sought support from Pakistan and foreign powers.
6. The **Razakars**, a paramilitary force under **Qasim Razvi**, carried out communal violence and atrocities, escalating tensions.

Causes of Operation

1. **Strategic Concern:** Hyderabad was in the heart of India — independence would fragment Indian territory.
2. **Security Concern:** Razakars' activities created law and order issues and communal unrest.
3. **Failed Negotiations:** Peaceful talks failed; the Nizam refused to accede.
4. **National Unity:** Sardar Patel insisted Hyderabad's accession was essential for India's integrity.

The Operation (13–17 Sept 1948)

1. The Indian Army launched "**Operation Polo**" on **13 September 1948.**
2. **Major General J.N. Chaudhuri** led the operation. **Hence statement 3 is correct.**
3. Hyderabad's commander **Syed Ahmed El Edroos** surrendered on **17 September 1948.**
4. The Nizam declared a ceasefire and accepted **accession to India.**
5. The operation lasted **five days** and was termed a "Police Action" to reduce international criticism. **Hence statement 2 is correct.**

Aftermath

1. Hyderabad became part of the **Indian Union**; later merged with Andhra to form Andhra Pradesh (1956).
2. **Civilian Casualties:** The Sunderlal Committee (1949) reported large-scale violence and deaths (estimates vary from 20,000 to over 40,000, mostly Muslims).
3. The Nizam was retained as **Rajpramukh (Governor)** until 1956 as a conciliatory gesture.
4. **Communal tensions** persisted but India's unity was secured.

Significance

1. **Political Integration:** Marked the end of princely ambitions of independence.
2. **Central Authority Asserted:** Showed India's readiness to use force for national integrity.
3. **Strategic Security:** Prevented an "independent enclave" in central India.
4. **Legacy:** Remains controversial due to civilian deaths and communal violence, but historically key for India's unity.

PYQ REFERENCE: (2024)

Q. Operations undertaken by the Army towards upliftment of the local population in remote areas to include addressing of their basic needs is called:

- (a) Operation Sankalp
- (b) Operation Maitri
- (c) Operation Sadbhavana**
- (d) Operation Madad

Source:

<https://indianexpress.com/article/explained/explained-history/operation-polo-was-launched-hyderabad-77-years-10247784/>

145. Gyan Bharatam Mission

145. With reference to the Gyan Bharatam Mission, consider the following statements:

1. It aims to digitize, preserve and disseminate India's manuscript heritage.
2. The Mission has been allocated more than ₹400 crore for the period 2024-31.
3. It is being implemented by the Ministry of Education.

Which of the above statements is/are correct?

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

Answer: (b) 1 and 2 only

Explanation:

In NEWS: PM Modi Launches Gyan Bharatam Portal, Calls Mission a Voice of India's Cultural and Knowledge Legacy

Gyan Bharatam Portal / Mission:

- Launched in 2025 by the **Ministry of Culture**, Government of India. **Hence statement 3 is incorrect.**
- Objective: **Preserve, digitise, document, and disseminate India's manuscript heritage.** **Hence statement 1 is correct.**
- Mission period: **2024–31.**
- Total outlay: **₹482.85 crore.** **Hence statement 2 is correct.**
- Aims to make manuscripts a "**living legacy**" through translation, research, and public access.
- Uses **digital and AI-driven tools** for preservation, decipherment, and metadata creation.
- The **Gyan Bharatam Portal** acts as the main digital platform for manuscript access.

- Over **44.07 lakh manuscripts** are already documented in the **Kriti Sampada** digital repository.
- **First International Conference** on Gyan Bharatam held at **Vigyan Bhawan, New Delhi (Sept 2025)**.
- Significance: Protects India's vast manuscript wealth, supports **research, education, cultural identity, and soft power diplomacy**.

Source: <https://www.newsonair.gov.in/pm-modi-launches-gyan-bharatam-portal-calls-mission-a-voice-of-indias-cultural-and-knowledge-legacy/>

146. Gussadi Dance

146. Which one of the following is the correct description of the Gussadi Dance?

- A traditional tribal dance form wearing elaborate headgear made of peacock feathers performed by the Gond and Raj Gond communities, primarily in the Telangana region of India.
- A classical Indian dance from Odisha known for its graceful hand gestures and storytelling of Lord Krishna's life, usually performed in temples and cultural festivals.
- A vibrant folk dance from Punjab characterized by energetic group movements and the use of sticks, performed to celebrate the harvest season and community unity.
- A masked ritual dance performed by Buddhist monks in the Himalayas, symbolizing the victory of good over evil, usually held during special religious ceremonies in monasteries.

Answer: (a) A traditional tribal dance form wearing elaborate headgear made of peacock feathers performed by the Gond and Raj Gond communities, primarily in the Telangana region of India.

Explanation:

In NEWS: Members of the Raj Gond tribe from Adilabad district of Telangana rehearsing Gussadi dance for the 78th Hyderabad Liberation Day celebrations.



Gussadi Dance:

- Gussadi is a traditional tribal dance form performed by the Gond and Raj Gond communities, primarily in the Telangana region of India.
- It is mainly associated with the Dandari Festival, celebrated after Diwali, and is seen as a form of ancestral worship and thanksgiving.
- Gussadi dancers wear elaborate headgear made of peacock feathers, animal fur, and body paint, often taking days to prepare.

- The dance is traditionally performed by men, who move from village to village, dancing and enacting stories from tribal folklore and mythology.
- It is particularly popular in the Adilabad district of Telangana, especially among the Raj Gond tribes of Komaram Bheem Asifabad, Utnoor, and Narnoor regions.
- Gussadi is more than a dance—it's a spiritual and cultural ritual, symbolizing harvest joy, cultural pride, and tribal identity.
- The performers are usually led by a "Pujari" (priest) who conducts rituals before and after the performance.
- The dance has been passed down orally and through practice, making it a vital part of the intangible cultural heritage of the region.
- Telangana government has taken steps to promote and preserve Gussadi as part of tribal cultural preservation.
- Komaram Bheem, a tribal freedom fighter and symbol of resistance, is often remembered in connection with Gussadi traditions.

Hence option (a) is correct.

PYQ REFERENCE:

Q. With reference to the famous Sattriya dance, consider the following statements:

- Sattriya is a combination of music, dance and drama.
- It is a centuries-old living tradition of Vaishnavites of Assam.
- It is based on classical Ragas and Talas of devotional songs composed by Tulsidas, Kabir and Mirabai.

Which of the statements above is/are correct?

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3

Source: The Hindu

147. Chhath' festival

147. Which one of the following is not included in the Intangible Cultural Heritage List of the UNESCO?

- Chhath festival
- Vedic Chanting
- Garba dance
- Mudiyettu

Answer: (a) Chhath festival

Explanation:

In NEWS: India seeks UNESCO recognition for 'Chhath'.

- In tentative list, not yet added in the list. **Hence option (a) is correct**

Chhath Festival:

- Chhath is a major Hindu festival dedicated to worship of the Sun God (Surya) and Chhathi Maiya.
- It is mainly celebrated in Bihar, Jharkhand, Eastern Uttar Pradesh, and parts of Nepal.
- The festival is observed to thank the Sun for sustaining life on earth and to seek blessings for health and prosperity.

- Chhath Puja is celebrated over four days, usually in October–November, after Diwali.
- Devotees observe strict fasting, including nirjala vrat (fasting without water), and practice purity and discipline.
- Rituals include holy bathing, standing in water, and offering 'arghya' (water offerings) to the rising and setting sun.
- The main offerings include thekua, fruits, and other homemade delicacies placed in bamboo baskets.
- Chhath is known for its environment-friendly and community-based celebrations, often on riverbanks and ponds.
- It is one of the few Hindu festivals that worship the setting sun as well as the rising sun.
- The festival promotes family bonding, devotion, and gratitude to nature.

Intangible Cultural Heritage List of UNESCO:

- Meitei Sankirtana — ritual singing, drumming and dancing of Manipur.
- Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region.
- Tradition of Vedic chanting.
- Ramlila, the traditional performance of the Ramayana.
- Kutiyattam, Sanskrit theatre (Kerala).
- Ramman, religious festival and ritual theatre of the Garhwal Himalayas.
- Mudi yettu, ritual theatre and dance drama of Kerala.
- Kalbelia folk songs and dances of Rajasthan.
- Chhau dance.
- Traditional brass and copper craft of utensil making among the Thatheras of Jand
- Garba of Gujarat was added in 2023.

PYQ REFERENCE: (2024)

Q. Which one of the following was the latest inclusion in the Intangible Cultural Heritage List of UNESCO?

- (a) Chhau dance
- (b) Durga puja
- (c) Garba dance**
- (d) Kumbh mela

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/148461/OPS/GJMESFPC6.1+GHCETJGND.1.html

148. Dadasaheb Phalke Award

148. Consider the following statements with respect to the "Dadasaheb Phalke Award":

1. It is India's highest award to honour for the remarkable service of the Non Governmental organizations.
2. The award is presented annually by the Ministry of Social Justice and Empowerment.

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

Answer: (d) Neither 1 nor 2

Explanation:

In NEWS: Actor Mohanlal dedicates Dadasaheb Phalke Award to Malayalam film industry

The Dadasaheb Phalke Award:

- The **Dadasaheb Phalke Award** is India's **highest honour in cinema**, instituted in **1969** to commemorate the father of Indian cinema, Dhundiraj Govind Phalke. **Hence statement 1 is incorrect.**
- The award is presented **annually at the National Film Awards** ceremony, administered by the **Directorate of Film Festivals** under the Ministry of Information & Broadcasting. **Hence statement 2 is incorrect.**
- It is given to individuals for their **outstanding lifetime contribution to the growth and development of Indian cinema.**
- The award consists of a **Swarna Kamal (Golden Lotus) medallion**, a **shawl**, and a **cash prize of ₹10 lakh.**
- **Devika Rani** was the **first recipient** of the award in **1969.**
- **Mohanlal**, the veteran Malayalam actor, was the **latest recipient (2023)** at the **71st National Film Awards.**
- The selection of awardees is done by a **committee of eminent film industry personalities.**
- Dadasaheb Phalke directed *Raja Harishchandra* in **1913**, regarded as the **first full-length Indian feature film.**

PYQ REFERENCE: (2023)

Q. Consider the following pairs with regard to sports awards:

1. Major Dhyan Chand Khel Ratna Award - For the most spectacular and outstanding performance by a sportsperson over period of last four years
2. Arjuna Award - For the lifetime achievement by sportsperson
3. Dronacharya Award - To honour eminent coaches who have successfully trained sportspersons or teams
4. Rashtriya Khel Protsahan Puraskar - To recognize the contribution made by sportspersons even after their retirement

How many of the above pairs are correctly matched?

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

Source:

<https://www.thehindu.com/news/national/kerala/actor-mohanlal-dedicates-dadasaheb-phalke-award-to-malayalam-film-industry/article70076532.ece>

149. UNESCO's World Heritage Sites in India

149. Consider the following:

1. Kakatiya Rudreshwara Temple
2. Erra Matti Dibbalu
3. Ajanta Caves
4. Varkala Cliffs
5. Maratha Military Landscapes
6. Tirumala Hills
7. Mound-Burial System of the Ahom Dynasty

Which of the above properties were included in UNESCO's World Heritage Sites?

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

Answer: (c) 1, 3, 5 and 7 only

Explanation:

In NEWS:

- Seven remarkable natural heritage sites from India have been included in UNESCO's Tentative List of World Heritage Sites.
- India now has a total of 69 sites under consideration by UNESCO, comprising 49 cultural, 17 natural, and 3 mixed heritage properties. This accomplishment reaffirms India's unwavering commitment to preserving and promoting its extraordinary natural and cultural legacy.

Newly Added Sites in Tentative List:

1. **Deccan Traps at Panchgani and Mahabaleshwar, Maharashtra**: Home to some of the best-preserved and studied lava flows in the world, these sites form part of the massive Deccan Traps and are located within the Koyna Wildlife Sanctuary—already a UNESCO World Heritage Site.

2. **Geological Heritage of St. Mary's Island Cluster, Karnataka**: Known for its rare columnar basaltic rock formations, this island cluster dates back to the Late Cretaceous period, offering a geological snapshot from around 85 million years ago.

3. **Meghalayan Age Caves, Meghalaya**: The stunning cave systems of Meghalaya, particularly the Mawmluh Cave, serve as the global reference point for the Meghalayan Age in the Holocene Epoch, reflecting significant climate and geological transitions.

4. **Naga Hill Ophiolite, Nagaland**: A rare exposure of ophiolite rocks, these hills represent oceanic crust uplifted onto continental plates—offering deep insights into tectonic processes and mid-ocean ridge dynamics.

5. **Erra Matti Dibbalu (Red Sand Hills), Andhra Pradesh**: These visually striking red sand formations near Visakhapatnam showcase unique paleo-climatic and coastal geomorphological features that reveal Earth's climatic history and dynamic evolution.

6. **Natural Heritage of Tirumala Hills, Andhra Pradesh**: Featuring the Eparchaean Unconformity and the iconic Silathoranam (Natural Arch), this site holds immense geological significance, representing over 1.5 billion years of Earth's history.

7. **Varkala Cliffs, Kerala**: The scenic cliffs along Kerala's coastline expose the Warkalli Formation of the Mio-Pliocene age, along with natural springs and striking erosional landforms, offering both scientific and touristic value.

Hence 2, 4 and 6 are not yet added.

List of World Heritage Sites in India:

Cultural - 36

- [Agra Fort](#) (1983)
- [Ajanta Caves](#) (1983)
- [Archaeological Site of Nalanda Mahavihara at Nalanda, Bihar](#) (2016)

- [Buddhist Monuments at Sanchi](#) (1989)
- [Champaner-Pavagadh Archaeological Park](#) (2004)
- [Chhatrapati Shivaji Terminus \(formerly Victoria Terminus\)](#) (2004)
- [Churches and Convents of Goa](#) (1986)
- [Dholavira: a Harappan City](#) (2021)
- [Elephanta Caves](#) (1987)
- [Ellora Caves](#) (1983)
- [Fatehpur Sikri](#) (1986)
- [Great Living Chola Temples](#) (1987, 2004)
- [Group of Monuments at Hampi](#) (1986)
- [Group of Monuments at Mahabalipuram](#) (1984)
- [Group of Monuments at Pattadakal](#) (1987)
- [Hill Forts of Rajasthan](#) (2013)
- [Historic City of Ahmadabad](#) (2017)
- [Humayun's Tomb, Delhi](#) (1993)
- [Jaipur City, Rajasthan](#) (2019)
- [Kakatiya Rudreshwara \(Ramappa\) Temple, Telangana](#) (2021)
- [Khajuraho Group of Monuments](#) (1986)
- [Mahabodhi Temple Complex at Bodh Gaya](#) (2002)
- [Maratha Military Landscapes of India](#) (2025)
- [Moidams – the Mound-Burial System of the Ahom Dynasty](#) (2024)
- [Mountain Railways of India](#) (1999, 2005, 2008)
- [Qutb Minar and its Monuments, Delhi](#) (1993)
- [Rani-ki-Vav \(the Queen's Stepwell\) at Patan, Gujarat](#) (2014)
- [Red Fort Complex](#) (2007)
- [Rock Shelters of Bhimbetka](#) (2003)
- [Sacred Ensembles of the Hoysalas](#) (2023)
- [Santiniketan](#) (2023)
- [Sun Temple, Konârak](#) (1984)
- [Taj Mahal](#) (1983)
- [The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement](#) (2016)
- [The Jantar Mantar, Jaipur](#) (2010)
- [Victorian Gothic and Art Deco Ensembles of Mumbai](#) (2018)

Hence option (c) 1, 3, 5 and 7 are correct.

Natural - 7

- [Great Himalayan National Park Conservation Area](#) (2014)
- [Kaziranga National Park](#) (1985)
- [Keoladeo National Park](#) (1985)
- [Manas Wildlife Sanctuary](#) (1985)
- [Nanda Devi and Valley of Flowers National Parks](#) (1988, 2005)
- [Sundarbans National Park](#) (1987)
- [Western Ghats](#) (2012)

Mixed - 1

- [Khangchendzonga National Park](#) (2016)

PYQ REFERENCE: (2024)

Q. Consider the following properties included in the World Heritage List released by UNESCO:

1. Shantiniketan.
2. Rani-ki-Vav
3. Sacred Ensembles of the Hoysalas
4. Mahabodhi Temple Complex at Bodhgaya

How many of the above properties were included in 2023?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2168105>

150. Lothal

150. With reference to the history of India, consider the following statements:

- Lothal is famous for having one of the world's earliest known dockyards.
- Lothal has evidence of weighing systems for commerce and trading activities.
- The National Maritime Heritage Complex (NMHC) in India is located at Lothal.

How many of the statements given above are correct?

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

Answer: (c) All three

Explanation:

In NEWS: PM Modi to review Maritime Heritage Complex at Lothal

The National Maritime Heritage Complex (NMHC):

- The National Maritime Heritage Complex (NMHC) is being developed at **Lothal, Gujarat**, an Indus Valley site with the world's earliest known dockyard. **Hence statement 3 is correct.**
- It is an initiative under the **Sagarmala Programme**, led by the **Ministry of Ports, Shipping and Waterways**.
- The project aims to showcase **India's maritime heritage from Harappan times to the present** through museums, galleries, and theme parks.
- The Ministry of Culture has signed an **MoU** with the Ministry of Ports, Shipping & Waterways to provide artefacts and content for exhibitions.
- Once completed, it will be among the **largest maritime museums in the world**, boosting India's cultural tourism and maritime identity.

Lothal:

- Lothal is an archaeological site of the **Indus Valley Civilization (Harappan Civilization)**, located in **Gujarat**, near the Gulf of Khambhat.
- Excavation was carried out in 1954–1960 by **S. R. Rao**, a prominent Indian archaeologist.
- Lothal was an important **trading and manufacturing centre** of the Indus Valley Civilization (~2400–1900 BCE).
- It is famous for having one of the **world's earliest known dockyards**, facilitating maritime trade. **Hence statement 1 is correct.**

- The site shows evidence of **bead making, gem polishing, semi-precious stone trade, and weighing systems** used in commerce. **Hence statement 2 is correct.**

Key Features of the Site

- Dockyard:** Rectangular basin connected to a river, showing advanced maritime engineering.
- Bead-making workshops:** Indicating high-level craft and trade activities.
- Seal impressions & weights:** Evidence of trade, commerce, and administrative control.
- Drainage & residential structures:** Demonstrates planned urban layout typical of Harappan sites.

PYQ REFERENCE: (2021)

Q. Which one of the following ancient towns is well-known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs?

- (a) Dholavira
(b) Kalibangan
(c) Rakhigarhi
(d) Ropar

Source:

<https://www.thehindu.com/news/national/gujarat/pm-modi-to-review-national-maritime-heritage-complex-at-lothal/article70065658.ece>

151. Traditional Ritual Theatres of India

151. Consider the following information:

S.No	Traditional Ritual Theatres of India	State/Region	Description
1	Kutiyattam	Kerala	blends Sanskrit drama with local traditions
2	Mudiyettu	Tamil Nadu	dance-drama of goddess Kali's battle with demon Darika
3	Ramman	Kerala	Festival in honor of local deity Bhumiyaal Devta
4	Ramlila	Northern India	Dramatic enactment of Ramayana during Dussehra

In which of the above rows is the given information correctly matched?

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

Answer: (d) 1 and 4

Explanation:

In NEWS: Sacred Stages: Traditional Ritual Theatres of India

Four Key Indian Ritual Theatres on UNESCO's ICH List
Kutiyattam (Kerala)

- Over 2,000 years old; blends Sanskrit drama with local Kerala traditions.
- Noted for codified eye & hand gestures.
- Performances can last up to 40 days.
- Performed in temple theatres (kuttampalams). **Hence row 1 is correct.**

Mudiyettu (Kerala)

- Annual ritual dance-drama of goddess Kali's battle with demon Darika.
 - Village-wide participation across castes.
 - Involves ritual drawing (kalamezhuthu), masks, costumes.
- Hence row 2 is incorrect.**

Ramman (Uttarakhand)

- Festival in honor of local deity Bhumiya Devta.
- Masked dances, Ramayana recitations.
- Entire village contributes based on caste roles. **Hence row 3 is incorrect.**

Ramlila (Northern India)

- Dramatic enactment of Ramayana during Dussehra.
- Community-based with amateur actors.
- Performed in temple grounds, public squares. **Hence row 4 is correct.**

List of UNESCO Intangible Cultural Heritage (ICH) elements in India:

1. Kutiyattam – Kerala
2. Mudiyettu – Kerala
3. Ramman – Uttarakhand
4. Ramlila – Multiple states (mainly Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan)
5. Chhau Dance – Jharkhand, Odisha, West Bengal
6. Kalbelia Folk Songs and Dance – Rajasthan
7. Sankirtana – Manipur
8. Bamboo Craftsmanship – Northeast India (Various states)
9. Yoga – Nationwide (originated in Uttarakhand)
10. Mudiyettu – Kerala
11. Tangka Painting – Sikkim, Himachal Pradesh
12. Langa-Mangani Folk Music and Dance – Rajasthan
13. Chaurasia Bamboo Craft – Bihar
14. Kabir Nacha – Jharkhand

PYQ REFERENCE: (2024)

Q. Which one of the following was the latest inclusion in the Intangible Cultural Heritage List of UNESCO?

- (a) Chhau dance
- (b) Durga puja
- (c) Garba dance**
- (d) Kumbh mela

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2172657>

152. World Tourism Day

152. With reference to the 'World Tourism Day', consider the following statements:

- I. The World Tourism Day is an initiative of the World Travel & Tourism Council (WTTC).
- II. It is observed annually on September 27 and was celebrated for the first time in the year 1980.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Answer: (b) II only

Explanation:

In NEWS:

World Tourism Day 2025:

- World Tourism Day, observed annually on September 27, is an initiative of the United Nations World Tourism Organisation (UNWTO). **Hence statement I is incorrect.**
- It commemorates the adoption of the UNWTO statutes in 1970 and emphasises the sector's role in supporting the socio-economic growth of countries and advancing the global Sustainable Development Goals (SDGs).
- It was celebrated for the first time in the year 1980. **Hence statement II is correct.**
- The theme for World Tourism Day 2025 is **"Tourism and Sustainable Transformation,"** emphasising tourism's power to promote positive change.
- **Malaysia** will host the World Tourism Day and the World Tourism Conference (WTC) 2025 in the city of Melaka from September 27th to 29th.

Major Tourism Schemes & Projects in India:

Swadesh Darshan & Swadesh Darshan 2.0

- 110 total projects across thematic circuits (Buddhist, Coastal, Tribal, etc.)
- SD 2.0 promotes sustainable and destination-centric tourism.
- Key projects: Bodh Gaya, Hampi, Bangaram, Sohra Caves, Attari, etc.

Challenge-Based Destination Development (CBDD)

- 36 projects in 2024-25 across eco, spiritual, and cultural themes.
- Notable projects in Gujarat, Punjab, Chhattisgarh, Telangana, Manipur, etc.

PRASHAD Scheme

- Focus on pilgrimage site development.
- 54 projects across 28 States/UTs with ₹1168 crore sanctioned.
- Key sites: Tripura Sundari, Chamundeshwari Temple, Patna Sahib, Somnath, etc.

Special Assistance to States for Capital Investment (SASCI)

- 40 projects sanctioned for ₹3295.76 crore.
- Fully funded by the Central Government.
- Example: Jal Mahal, Jaipur.

Dekho Apna Desh

- Promotes domestic tourism via online activities, campaigns, and polls.

Vibrant Villages Programme (VVP-I & II)

- Develops villages along strategic border areas.
- Encourages eco, cultural, and heritage tourism.

Capacity Building (CBSP)

- Paryatan Mitra/Didi initiative to train locals, women, and tribal communities.

Digital Transformation

- Incredible India Digital Portal & Content Hub launched.
- Features AI chatbot, booking tools, and multimedia content.

Homestay Promotion

- Support for rural & tribal homestays via NIDHI portal.
- ₹5 lakh assistance per homestay; collateral-free Mudra Loans available.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2171731>

153. Bhakti movement in temple worship

153. Consider the following statements about the Bhakti movement in temple worship:

1. It encouraged participation of all people regardless of caste.
2. It saw an increased role of temple music, dance, and devotional singing.
3. It led to the abolition of temple rituals and sanctum sanctorum architecture.

Which of the statements is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: How Hindu temples survived political upheavals and philosophical shifts

- Early Hindu sacred practices revolved around **nature worship such as trees, rivers, mountains, and animals**.
- Around the 2nd century CE, **image worship began** with recognizable deities like **Shiva and Vishnu** appearing in sculptures.
- Enclosed sanctuaries and temples of brick and stone emerged by the 5th–6th centuries CE (**e.g., Bhitargaon, Deogarh**).
- **Rock-cut temples (Ellora, Elephanta)** and free-standing temples flourished, with regional styles such as **Nagara (North) and Dravidian (South)** evolving.
- Initially, temples functioned as ritual laboratories for **Tantric practices**, but over time, with the **Bhakti movement**, they became public devotional spaces.

The Bhakti movement emphasized **personal devotion, music, dance, and collective worship**, reducing priestly exclusivity.

Shift in Worship Practices

- Earlier temples were ritual-centric, dominated by priests and Tantric traditions.

- Bhakti movement made worship more personal, emotional, and accessible.

Role of Temples

- Temples became centres of collective devotion—public singing, dancing, storytelling.
- Rituals coexisted with bhajans, kirtans, and folk performances.

Hence statement 2 is correct.

Social Inclusivity

- Bhakti saints challenged caste and ritual barriers.
- Temples increasingly welcomed participation by all social groups, not just elites. **Hence statement 1 is correct.**

Cultural Flourishing

- Growth of regional devotional traditions—Alvars and Nayanars in Tamil Nadu, Varkari in Maharashtra, Sant tradition in North India.

- Temple worship absorbed local art, literature, and music.

Resilience in Political Upheavals

- Even when political forces targeted grand temples, the Bhakti tradition kept worship alive in small shrines and homes.

Legacy

- Established temples as not only ritual sites but also social, cultural, and artistic hubs.

- Strengthened continuity of Hindu worship practices up to the present day.

- Bhakti did not abolish rituals or temple structures; it democratized access and enriched practices. **Hence statement 3 is incorrect.**

PYQ REFERENCE: (2012)

Q. The Nagara, the Dravida and the Vesara are the

- (a) three main racial groups of the Indian subcontinent
- (b) three main linguistic divisions into which the languages of Indian can be classified
- (c) three main styles of Indian temple architecture**
- (d) three main musical Gharanas prevalent in India

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/devdutt-pattanaik-how-hindu-temples-survived-political-upheavals-10272849/>

154. GI tagged items

154. Sifung, Aronai, Khardwi and Jou Gishi, seen in the news are GI tagged items from

- (a) The Bodoland Territorial Region
- (b) Meghalaya
- (c) The Union Territory of Ladakh
- (d) Manipur

Answer: (a) The Bodoland Territorial Region

Explanation:

In NEWS: The registration of 21 items so far has enthused 26 communities of the Bodoland Territorial Region to have their cultural artefacts GI-tagged

The Bodoland Territorial Region:

- The Bodoland Territorial Region (BTR) is an **autonomous division in Assam**, India, in Northeast India.
- It is made up of **five districts on the north bank of the Brahmaputra River** below the foothills of Bhutan and Arunachal Pradesh.
- It is administered by an elected body known as the Bodoland Territorial Council which came into existence under the terms of a peace agreement signed in February 2003 and its autonomy was further extended by an agreement signed in January 2020.
- The region covers an area of over nine thousand square kilometres and is predominantly inhabited by the Bodo people and other tribal communities of Assam.

GI Tagged Products from the Bodoland Territorial Region: Traditional Attire & Textiles

1. Bodo Dokhona: The traditional one-piece garment for Bodo women, wrapped around the body in a graceful style. GI-tagged in 2024
2. Bodo Eri Silk: Handwoven silk made from Eri silkworms (*Samia Cynthia Ricini*), native to the region, valued for its softness and heritage weaving practices
3. Bodo Jwmgra: Also known as Fashra or Pali, this is a long scarf worn by Bodo women alongside the Dokhona
4. Bodo Gamsa: Traditional wear for Bodo men, tied around the waist and extending from waist to knee
5. Aronai: A handwoven textile symbolizing Bodo identity and pride.

Agricultural Products

6. Bodo Keradapini: A small, nearly stemless leafy vegetable endemic to the region
7. Bodo Khardwi: A traditional alkaline liquid derived from bamboo, banana stems, or dried plant ashes, used in local cuisine
8. Bodo Gongar Dunjia (also referred to as Gongar Dundia): A rare and regionally significant medicinal plant, valued in traditional herbal systems

Musical Instruments

9. Kham: A traditional percussion instrument intrinsic to Bodo cultural performances
10. Serja (Serza): A bowed string instrument used in Bodo folk music
11. Sifung (Siphung): A traditional bamboo flute with distinctive folk melodies
12. Thorkha: A lesser-known traditional instrument, also GI-tagged
13. Gongona: Another traditional musical instrument used in cultural ceremonies
14. Jotha: A traditional wind instrument used by Bodo musicians

Culinary Specialties

15. Bodo Napham: A cherished fermented fish delicacy, prepared anaerobically in airtight containers over 2–3 months. A preservation method adapted to the region's heavy rainfall and periodic fish scarcity
16. Bodo Ondla (Onla): A savory curry made from rice powder seasoned with garlic, ginger, salt, and alkali
17. Bodo Gwkha-Gwkhwi (Bodo Gwkha, also Gwka-Gwkhwi): A festive dish with more than a hundred mixed vegetables, traditionally prepared during the Bwisagu (spring) festival

18. Bodo Narzi: A semi-fermented jute-leaf dish—a rich source of omega-3s, vitamins, calcium, and minerals—reflecting local nutritional wisdom

Traditional Beverages

19. Bodo Jou Gwran: A strong rice beer with an alcohol content of approximately 16.11%, the highest among Bodo rice beers
20. Maibra Jou Bidwi (Maibra Jwu/Zwu Bidwi): A revered ferment made from half-cooked rice with minimal water and amao (natural yeast); commonly served as a welcome drink
21. Bodo Jou Gishi: A traditional and historically significant rice-based fermented alcoholic beverage, considered medicinal and culturally sacred

Hence option (a) is correct.

PYQ REFERENCE: (2015)

Q. Which of the following has/have been accorded 'Geographical Indication' status?

1. Banaras Brocades and Sarees
2. Rajasthani Daal-Bati-Churma
3. Tirupathi Laddu

Select the correct answer using the code given below:

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

Source:

<https://www.thehindu.com/news/national/assam/buzz-around-gi-tagging-in-assams-poll-bound-bodoland/article70019197.ece#:~:text=A%20few%20mont hs%20ago%2C%20the.Kacharis%2C%20Hiras%2C%20and%20Patnis.>

155. Pashmina Shawl

155. With reference to the traditional 'Pashmina Shawl' of India, consider the following statements:

1. The wool used for Pashmina shawls is obtained from a special breed of Changthangi (goat) indigenous to the high altitudes of the Himalayas.
2. It is under the consideration of tentative list to be certified for Geographical Indication (GI) Tag

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

Answer: (a) 1 only

Explanation:

In NEWS: PM Modi's gifts to Prime Minister of Japan and his wife

Pashmina Shawl

- Origin & Region: Pashmina refers to a fine type of cashmere wool obtained from the Changthangi goat (*Capra hircus*) found in

high altitudes of Ladakh, Jammu & Kashmir. **Hence statement 1 is correct.**

- Weaving Tradition: Hand-spun and hand-woven by Kashmiri artisans; known for its soft texture, warmth, and intricate embroidery.

- Geographical Indication (GI) Tag: Granted in 2008, ensuring authenticity and protecting artisans. **Hence statement 2 is incorrect.**

- Economic & Cultural Value: Symbol of Kashmiri cultural heritage; contributes significantly to local livelihoods and India's handicraft exports.

Challenges:

- Influx of machine-made imitations threatening genuine artisans.

- Declining number of skilled craftsmen due to low returns.

- Climate change affecting Changthangi goat habitat.

Government Initiatives:

- Pashmina Testing & Quality Certification Centre (PTQCC) in Leh.

- GI label enforcement and promotion under Handloom Marketing Assistance Scheme.

- Export promotion via India Handloom Brand (IHB).

PYQ REFERENCE: (2018)

Q. Consider the following pairs:

Craft	Heritage of
1. Puthukkuli shawls	- Tamil Nadu
2. Sujni embroidery	- Maharashtra
3. Uppada Jamdani saris	- Karnataka

Which of the pairs given above is/are correct?

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

Source: <https://www.thehindu.com/news/national/pm-modis-gifts-to-prime-minister-of-japan-and-his-wife/article69992543.ece>

156. Char Dham Yatra

156. With reference to Char Dham Yatra, consider the following statements:

1. It refers to Yamunotri, Gangotri, Kedarnath, and Badrinath shrines in Uttarakhand.
2. The pilgrimage was popularized by Ramanujacharya.

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

Answer: (a) 1 only

Explanation:

In NEWS: Char Dham Yatra reels from climate shocks as 55 “zero-pilgrim days” recorded

Char Dham Yatra:

- Char Dham refers to the four sacred pilgrimage sites in Uttarakhand's Garhwal Himalayas: Yamunotri, Gangotri, Kedarnath, and Badrinath. **Hence Statement 1 is correct**

- The Yatra was popularized by Adi Shankaracharya in the 8th century CE. **Hence Statement 2 is incorrect**

- The pilgrimage is undertaken in a **clockwise direction**: Yamunotri → Gangotri → Kedarnath → Badrinath.

- Yamunotri is dedicated to **Goddess Yamuna**, origin of the Yamuna River.

- Gangotri is dedicated to **Goddess Ganga**, origin of the Ganga River (Bhagirathi).

- Kedarnath is dedicated to **Lord Shiva** and is one of the **12 Jyotirlingas**.

- Badrinath is dedicated to **Lord Vishnu (Badrinarayan)**.

- The Yatra generally remains open from **April/May to October/November**, and is closed in winter due to heavy snowfall.

- Managed by the **Uttarakhand Char Dham Devasthanam Management Board** (though governance has seen reforms and debates).

- The **Char Dham Highway Project** aims to improve all-weather connectivity to these shrines.

- The pilgrimage is significant for **religious tourism**, but raises concerns over **environmental degradation, landslides, and over-tourism**.

- **Distinction:**

- Chota Char Dham → Yamunotri, Gangotri, Kedarnath, Badrinath (Uttarakhand).

- Bada Char Dham → Badrinath, Dwarka, Jagannath Puri, Rameswaram (pan-India).

PYQ REFERENCE: (2017)

Q. Consider the following pairs:

Traditions	Communities
1. Chaliha Sahib Festival	Sindhis
2. Nanda Raj Jaat Yatra	Gonds
3. Wari-Warkari	Santhals

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

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

Source: <https://www.downtoearth.org.in/natural-disasters/char-dham-yatra-reels-from-climate-shocks-as-55-zero-pilgrim-days-recorded>

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