



KingMakers
IAS Academy

Good Morning Test

(GMT)

Prelims Compilation

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KingMakers IAS Academy

CONTENT

POLITY AND GOVERNANCE	4
1. Article 15	4
2. Child Trafficking	4
3. Constitutional Powers of the Election Commission of India (ECI)	2
4. Budget Session of Parliament	3
7. Statehood Day.....	5
8. Kuki-Zo	6
9. Tulu Language	6
10. Service pensions in India.....	7
11. Public Interest Litigation.....	8
12. National Intelligence Grid (NATGRID).....	8
13. Unlawful Activities (Prevention) Act.....	9
14. Padma Awards.....	10
15. Delimitation in India	11
16. National Sports Governance Act.....	11
17. Border Roads Organisation	12
SCHEMES.....	13
1. SAMPANN	13
2. Schemes for Farmers	13
3. Design Linked Incentive Scheme	14
4. Nutrient-Based Subsidy (NBS) Scheme	15
5. SPREE 2025	15
6. Atal Pension Yojana.....	16
7. Sukanya Samridhi Yojana.....	17
8. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0.....	17
9. Pariipoorna Mediclaim Ayush Bima	18
10. Sampoonnata Abhiyan 2.0.....	18
11. PM E-DRIVE Scheme	19
12. The SAMAR initiative	20
13. SAMPANN	20
14. PANKHUDI.....	20
SCIENCE & TECHNOLOGY.....	22
1. Braille	22
2. Remote-sensing	22
3. Biomaterials	23
4. X-ray photoelectron spectroscopy (XPS)	24
5. Light Water Reactor (LWR)	24
6. India's hydro pumped storage.....	25
7. Mephedrone	26
8. Antimicrobial Resistance (AMR)	26
9. Nipah Virus	27
10. Huntington's Disease	28
11. Mars Return mission.....	28
12. PSLV-C62/EOS-N1 mission	29
15. Joint Exercise in 2025.....	31

17. TROPEX 25	31
ENVIRONMENT AND AGRICULTURE	32
1. Aravalli Green Wall initiative	32
2. Madhav Gadgil	32
3. Per- and polyfluoroalkyl substances (PFAS)	33
4. National Board for Wild Life	34
5. National Board for Wildlife	34
6. The Central Ground Water Board (CGWB)	35
7. Carbon Border Adjustment Mechanism (CBAM)	36
8. India's Climate Targets	36
10. Bio-Bitumen	38
12. India's pygmy hog	39
13. Madras hedgehog	40
14. Grey slender loris	41
15. Bactrian camel	42
16. The fishing cat	42
17. Nagauri Ashwagandha	43
18. Coringa Wildlife Sanctuary	44
19. Valley of Flowers	44
22. Inland Rainbow Trout Farm	46
23. Fisheries sector	47
24. Soybean Production & Trade	47
25. India in rice production	48
26. "Kaladi"	49
ECONOMY	49
1. Non-tax revenue	49
2. India is now fourth largest economy	50
3. Financial Stability Report (FSR)	50
5. Central bank digital currencies (CBDCs)	52
6. Export Preparedness Index (EPI)	52
7. Urban Co-operative Banks (UCBs)	53
9. Designs Act	54
10. "Zero defect - Zero effect"	55
11. Chips to Start-up (C2S) Programme	55
12. SWAMIH Fund	56
13. MAHSR project	56
14. Coal power generation in India	57
15. Critical & Strategic Minerals	58
INTERNATIONAL RELATIONS	58
1. Line of Actual Control (LAC)	58
2. Ganges Water Sharing Treaty	59
3. India-EU Free Trade Agreement (FTA)	60
4. India-Canada Energy Cooperation	61
5. Board of Peace	62
6. Indo-Pacific Oceans Initiative	62
7. World Economic Forum	63
9. Pax Silica	64
10. Palermo Protocol	65
11. High Seas Treaty	65
12. 2026 - United Nations international years	66
13. India-AI Impact Summit 2026	66

1. Tamsa River.....	67
2. Aravalli Range.....	67
3. Major Grasslands of the World.....	68
4. Doomsday Glacier.....	69
5. Polar Vortex.....	70
6. Ratle hydroelectric project.....	70
7. India's Tunnels.....	71
8. India's First Open-Sea Marine Fish Farming Project.....	72
ART AND CULTURE.....	73
1. Harvest Festivals in India.....	73
2. Theyyam.....	74
4. Somnath Temple.....	75
5. Char Dham temples.....	76
6. Lala Lajpat Rai.....	77
7. Rani Velu Nachiyar.....	78
10. Bhadrakali inscription.....	79
11. Buddhist Sites in UNESCO Tentative List.....	80
PLACES IN INEWS.....	80
1. Rafah border crossing.....	80
2. Mt Roraima.....	81
3. Somaliland.....	82
4. Shaksgam Valley.....	82

POLITY AND GOVERNANCE

1. Article 15

Q. With reference to Article 15 of the Indian constitution, Which of the following statements are correct?

1. Article 15 (1) applies only against the State and not against private individuals.
2. Article 15 (2) is enforceable both against the State and private individuals.
3. Article 15 (4) was inserted by the First Constitutional Amendment Act, 1951.
4. Article 15 (5) was added by the Ninety-third Constitutional Amendment Act, 2005.
5. Article 15 (6) was inserted by the One Hundred and Third Constitutional Amendment Act, 2019.

Select the correct answer using the code given below:

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

Answer: (d) 1, 2, 3, 4 and 5

Explanation:

In NEWS: Congress urges Centre to ensure reservation in private institutions under Article 15(5)

Article 15 of the Constitution of India:

- Article 15 prohibits **discrimination by the State** against any citizen on grounds **only of religion, race, caste, sex, or place of birth.**
 - Article 15(1) applies **only against the State** and not against private individuals. **Hence statement 1 is correct.**
 - Article 15(2) prohibits discrimination in **access to public places** such as shops, restaurants, hotels, places of public entertainment, wells, tanks, bathing ghats, roads, and public resorts.
 - Article 15(2) is enforceable **both against the State and private individuals.** **Hence statement 2 is correct.**
 - Article 15(3) allows the State to make **special provisions for women and children**, constituting an exception to clauses (1) and (2).
 - Article 15(4) enables the State to make special provisions for the advancement of **Socially and Educationally Backward Classes (SEBCs), Scheduled Castes, and Scheduled Tribes.**
 - Article 15(4) was inserted by the **First Constitutional Amendment Act, 1951.** **Hence statement 3 is correct.**
 - Article 15(5) permits reservation in **educational institutions, including private unaided institutions,** except **minority educational institutions.**
 - Article 15(5) was added by the **Ninety-third Constitutional Amendment Act, 2005.** **Hence statement 4 is correct.**
 - Article 15(6) provides for **special provisions and reservation up to 10% for Economically Weaker Sections (EWS)** other than SCs, STs, and OBCs.
 - Reservation under Article 15(6) is **in addition to existing reservations.**

- Article 15(6) was inserted by the **One Hundred and Third Constitutional Amendment Act, 2019.** **Hence statement 5 is correct.**

PYQ REFERENCE: (2023)

Q. Consider the following statements:

Statement-I: The Supreme Court of India has held in some judgments that the reservation policies made under Article 16(4) of the Constitution of India would be limited by Article 335 for maintenance of efficiency of administration.

Statement-II: Article 335 of the Constitution of India defines the term 'efficiency of administration'.

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/any-higher-education-regulator-must-oversee-article-155-implementation-says-congress/article70529251.ece>

2. Child Trafficking

Q. How many of the following articles in the constitution of India acts as a safeguard against child trafficking?

1. Article 23
2. Article 24
3. Article 39

Select the correct answer using the code given below.

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

Answer: (c) All the three

Explanation:

In NEWS: How should India tackle child trafficking? | Explained

Child trafficking:

- Child trafficking in India remains a **serious violation of children's rights** involving recruitment, transportation, or harbouring of children for exploitation.
- The crime violates fundamental rights such as the right to life, dignity, and freedom from exploitation, and persists due to poverty, migration, lack of education, and weak protections.

Legal & Constitutional Framework

India has a robust legal framework to protect children and prosecute traffickers:

a. Constitutional Provisions

- **Article 23** — prohibits human trafficking and forced labour.

- **Article 24** — prohibits the employment of children in hazardous occupations.
- **Article 39(e)** — the tender age of children are not abused
- **Article 39(f)** — that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment.

Hence all are correct.

b. Key Laws

- **Protection of Children from Sexual Offences (POCSO) Act, 2012** — safeguards children against sexual abuse with child-friendly trial mechanisms.
- **Immoral Traffic (Prevention) Act (ITPA), 1956** — addresses trafficking for sexual purposes.
- **Juvenile Justice (Care and Protection of Children) Act, 2015** — focuses on care, protection, rehabilitation and reintegration of trafficked and vulnerable children.
- **Criminal Offences under Bharatiya Nyaya Sanhita (BNS) 2023** — trafficking is criminalised including abduction, deceit, coercion and exploitation.

c. Institutional Framework

- **National & State Commissions for Protection of Child Rights** — statutory bodies protecting child rights across India.
- **Anti Trafficking Cell (MHA)** — coordinates law enforcement responses and interstate cooperation.

PYQ REFERENCE: (2021)

Q. 'Right to Privacy' is protected under which Article of the Constitution of India?

- (a) Article 15
- (b) Article 19
- (c) Article 21**
- (d) Article 29

Source: <https://www.thehindu.com/news/national/how-should-india-tackle-child-trafficking-explained/article70523068.ece>

3. Constitutional Powers of the Election Commission of India (ECI)

Q. Consider the following statements regarding the powers of the Election Commission of India (ECI):

1. The Election Commission has a constitutional duty to ensure that electoral rolls do not include non-citizens.
2. As per the provisions in the Indian constitution, only the citizens of India aged 18 years and above and not disqualified by law are eligible to be registered as voters.

Which of the statements given above 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: Election Commission says it has constitutional duty to bar foreigners from voter rolls

Constitutional Powers of the Election Commission of India (ECI)

- The Election Commission of India derives its powers directly from the **Constitution of India**, primarily to ensure free, fair, and impartial elections.
- The Election Commission's constitutional authority flows mainly from **Articles 324 to 329**, with **Article 324** forming the backbone, enabling the ECI to regulate elections and electoral rolls to protect the **citizen-centric democratic framework** of India.

Article 324: Core Constitutional Authority

- Vests the ECI with **plenary powers of superintendence, direction, and control** over:
 - Elections to Parliament
 - Elections to State Legislatures
 - Elections to the offices of President and Vice-President
- Includes power over:
 - Preparation and revision of electoral rolls
 - Conduct of elections
 - Enforcement of the Model Code of Conduct (through constitutional mandate)

Article 325: Single General Electoral Roll

- Prohibits discrimination in electoral rolls on grounds of: Religion, Race, Caste, Sex.
- Mandates **one general electoral roll** for each constituency.

Article 326: Adult Suffrage

- Provides that elections to the House of the People and State Legislative Assemblies shall be based on **adult suffrage**.
- Only **citizens of India aged 18 years and above** and not disqualified by law are eligible to be registered as voters. **Hence statement 2 is correct.**
- Empowers the ECI to **verify citizenship status** for inclusion in electoral rolls.

Note: Citizenship is a mandatory constitutional condition, the ECI must ensure that **non-citizens are not included** in electoral rolls. **Hence statement 1 is correct.**

Article 327: Parliamentary Law Subject to the Constitution

- Empowers Parliament to make laws relating to elections.
- Such laws are **subject to Articles 324 and 326**, preserving the constitutional primacy of the ECI.

Article 328: State Legislature Powers

- Allows State Legislatures to make laws on elections to State Legislatures, again **subject to the Constitution**.

Independence of the ECI (Article 324 safeguards)

- Chief Election Commissioner enjoys:
 - **Security of tenure**
 - Removal only in the manner of a Supreme Court judge
- Ensures institutional independence from executive interference.

PYQ REFERENCE: (2017)

Q. Consider the following statements:

1. The Election Commission of India is a five-member body.
2. Union Ministry of Home Affairs decides the election schedule for the conduct of both general elections and bye-elections.
3. Election Commission resolves the disputes relating to splits/mergers of recognised political parties.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/news/national/constitutional-duty-to-ensure-not-a-single-foreigner-in-electoral-roll-eci-defends-sir-in-sc/article70478655.ece>

4. Budget Session of Parliament

Q. Which of the following statements is/are correct regarding the Budget Session of Parliament?

1. As per the constitution of India, the Union Finance minister causes to be laid before Parliament an annual statement of estimated receipts and expenditure of the government
2. The President's recommendation is required before a money bill is introduced in Parliament.
3. Rajya Sabha can discuss and vote on the Demands for Grants
4. Rajya Sabha can suggest amendments to money bills within 14 days of receipt.

Select the correct answer using the code 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: (c) 2 and 4 only

Explanation:

In NEWS: Budget Session of Parliament to begin today

Article 112 – Annual Financial Statement (Union Budget)

- The President causes to be laid before Parliament an annual statement of estimated receipts and expenditure of the government (Union Budget). **Hence statement 1 is incorrect.**

Article 113 – Supplementary, Additional and Excess Grants

- Empowers Parliament to authorize supplementary expenditure over the original Budget.

Article 114 – Appropriation from Consolidated Fund of India

- No money can be withdrawn from the Consolidated Fund of India without Parliament's approval through the Appropriation Bill.

Budget Session of Parliament:

- The Budget Session is one of the **three annual sessions of the Indian Parliament**, along with the Monsoon and Winter sessions.
- Its **primary purpose** is the presentation, discussion, and approval of the **Union Budget**.

- The Budget Session usually occurs between **February and May**.
- The session typically lasts for about **three months**.

Key Components

- The **Union Budget** is presented by the **Finance Minister** in the **Lok Sabha**.
- The **Finance Bill** gives effect to the government's financial proposals, including **taxation and revenue measures**.
- The **Appropriation Bill** authorizes withdrawal of funds from the **Consolidated Fund of India**.
- **Demands for Grants** are presented by individual ministries and voted upon in the **Lok Sabha**.

Procedure

- The Budget is first **presented in the Lok Sabha**, usually on the **last day of February**.
- **General discussion** on the Budget is held in both **Houses of Parliament**.
- **Demands for Grants** are debated and voted only in **Lok Sabha**, not in Rajya Sabha. **Hence statement 3 is incorrect.**
- The **Finance Bill and Appropriation Bill** are introduced after the presentation of the Budget.
- The **President's recommendation** is required before a money bill can be introduced in Parliament. **Hence statement 2 is correct.**
- Rajya Sabha can **suggest amendments** to money bills within **14 days**, but Lok Sabha is not bound to accept them. **Hence statement 4 is correct.**

Significance

- The Budget Session ensures **Parliamentary control over government finances**.
- It provides a platform for **allocation of resources for government schemes and development projects**.
- It promotes **transparency, accountability, and debate on fiscal priorities**.
- Failure to pass the **Appropriation Bill** can halt government expenditure.

PYQ REFERENCE: (2024)

Q. With reference to Union Budget, consider the following statements:

1. The Union Finance Minister on behalf of the Prime Minister lays the Annual Financial Statement before both the Houses of Parliament
2. At the Union level, no demand for a grant can be on the recommendation of the President of India.

Which of the statements given above is/are correct?

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

Source: <https://www.newsonair.gov.in/budget-session-of-parliament-to-begin-today-2/>

5. Republic Day

Q. Consider the following pairs:

S.No	IMPORTANT DATE	SIGNIFICANCE
1	26th January 1930	Call for Purna Swaraj
2	9th December 1946	Constituent Assembly begins work
3	26th November 1949	Constitution comes into force
4	26th January 1950	Constitution of India adopted

How many of the Pairs given above are correctly matched?

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

Answer: (b) Only two

Explanation:

India's path from Independence to Republic

26th January 1930 – Call for Purna Swaraj

- The demand for Purna Swaraj (complete independence) became a formal political objective in 1929, after resolutions adopted during the national struggle for freedom.
- On 26th January 1930, Indians across the country observed Purna Swaraj Day, committing themselves to the goal of complete self-rule and rejecting dominion status under British governance.
- This declaration and nationwide observance marked a decisive shift in the freedom movement, articulating a clear political objective that went beyond demands for constitutional reforms under colonial rule.

Hence pair 1 is correct.

9th December 1946 – Constituent Assembly begins work

- The Constituent Assembly of India met for the first time on 9th December 1946 at the Constitution Hall, now the Central Hall of Parliament House.
- This marked the formal beginning of India's constitution-making process. Entrusted with the responsibility of framing a Constitution for independent India, the Assembly worked for two years, eleven months, and seventeen days to complete this historic task.
- During this period, it held eleven sessions spread over 165 days, with 114 days devoted to detailed discussion of the Draft Constitution.
- Its members were chosen through indirect elections by the Provincial Legislative Assemblies, along with representatives of the princely states, ensuring that the Constitution was shaped through a broadly representative and deliberative process. Hence pair 2 is correct.

15th August 1947 – India attains independence

- On 15th August 1947, India attained independence, bringing an end to nearly two centuries of colonial rule.
- The transfer of power marked the culmination of a long and sustained freedom struggle led by leaders, freedom movements, and ordinary citizens across the country.

- Independence restored political sovereignty to the Indian people and initiated the task of nation-building, as the newly free nation began shaping its future based on democratic ideals, unity, and self-determination.

26th November 1949 – Constitution of India adopted

- After nearly three years of extensive deliberations, the Constituent Assembly adopted the Constitution of India, completing one of the most significant exercises in democratic institution-building.
- The drafting process involved detailed discussions on the nature of the Indian State, the rights and duties of citizens, the balance of power between different parts of government, and safeguards for social justice and equality.
- The adoption of the Constitution marked the culmination of this collective effort to establish a governance framework rooted in democratic values and constitutional principles.
- The date of adoption, 26th November 1949, is formally recorded in the concluding line of the Preamble, underscoring its constitutional authority and historical importance. Hence pair 3 is incorrect.

26th January 1950 – Constitution comes into force

- When the Constitution came into effect on 26th January 1950, India was formally established as a Sovereign Democratic Republic, marking the beginning of constitutional governance in independent India.
- Through the 42nd Amendment Act in 1976, 'Socialist and Secular' were added, thereby making India Sovereign, Socialist Secular Democratic Republic.
- The newly drafted Constitution was enforced by replacing the Government of India Act 1935.
- With this, authority was given to democratic institutions operating under the Constitution, and sovereignty was placed with the people.
- The choice of 26th January was deliberate, as the date carried the historical legacy of the Purna Swaraj observance of 1930, when complete independence had been asserted as the national objective.
- By bringing the Constitution into force on this date, independent India symbolically connected the political aspirations of the freedom movement with the institutional framework of a constitutional republic. Hence pair 4 is incorrect.

PYQ REFERENCE: (1997)

Q. In the following quotation,

"WE THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a Sovereign Socialist Secular Democratic Republic and to secure to all its citizens: JUSTICE, social, economic and political; LIBERTY of thought, expression, belief faith and worship; EQUALITY of status and of opportunity: and to promote among them all; FRATERNITY assuring the dignity of the individual and the unity and the integrity of the Nation.

In our Constituent Assembly this 'X' do hereby adopt, enact and give to ourselves this Constitution.", 'X' stands for:

- (a) twenty-sixth day of January, 1950
(b) twenty-sixth day of November, 1949
(c) twenty-sixth day of January, 1949
(d) None of the above

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2218369®=3&lang=1>

6. National Voters' Day

Q. Consider the following statements:

Statement-I : National Voters' Day is observed annually on 25 January.

Statement-II: It was in 1950 that the Election Commission of India (ECI) was established on the same day.

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: The President of India, Smt Droupadi Murmu, graced and addressed the 16th National Voters' Day Celebrations in New Delhi today (January 25, 2026).

National Voters' Day:

- National Voters' Day (NVD) is observed annually on **25 January to commemorate the foundation of the Election Commission of India (ECI)** in 1950 under Article 324 of the Constitution. **Hence both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.**
- The day aims to promote electoral participation, voter awareness, and democratic values, with special focus on newly enrolled voters, especially youth.
- The theme of NVD 2026 – **"My India, My Vote"** (Citizen at the Heart of Indian Democracy) reflects ECI's commitment to citizen-centric electoral processes.
- Since its **inception in 2011**, NVD has become a mass civic movement, celebrated across 11 lakh polling stations, led by BLOs, DEOs, and CEOs, and supported by outreach activities under the SVEEP programme, ECI's flagship voter education initiative launched in 2009.
- India's electoral system has witnessed major reforms and innovations, including voter-friendly polling measures, digitisation of electoral rolls, fast EPIC delivery, webcasting of polling stations, enhanced training of election officials, stricter regulation of political parties, and extensive stakeholder engagement.
- At the global level, India has emerged as a leader in electoral governance through initiatives such as the **India International Conference on Democracy and Election Management (IICDEM) 2026 and the Delhi Declaration 2026**, which laid down five pillars for strengthening democratic elections worldwide.
- India's Chairship of International IDEA in 2026 further reinforces its role in promoting inclusive, resilient, and future-ready democracies.

PYQ REFERENCE: (1995)

Q. Who among the following have the right to vote in the elections to both the Lok Sabha and the Rajya Sabha?

- (a) Elected members of the Lower House of the Parliament
- (b) Elected members of the Upper House of the Parliament
- (c) Elected members of the Upper House of the State Legislature
- (d) Elected members of the Lower House of the State Legislature**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2218444®=3&lang=1>

7. Statehood Day

Q. Which among the following states attained statehood in the year 1972?

1. Manipur
2. Nagaland
3. Meghalaya
4. Tripura
5. Mizoram

Select the correct answer using the code given below.

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

Answer: (b) 1, 3 and 4 only

Explanation:

In NEWS: Prime Minister extends greetings to the people of Meghalaya, Manipur and Tripura on their Statehood Day

Early Independence & Reorganization (1947-1956)

1950: Constitution adopted, establishing Part A, B, C states.

1956 (States Reorganisation Act): Major redrawing of states; Andhra Pradesh, Kerala, Karnataka, Madras (later Tamil Nadu) formed.

Linguistic Reorganization (1960s-1970s)

1960: Gujarat & Maharashtra carved from Bombay State.

1963: Nagaland formed.

1972: Manipur, Meghalaya, & Tripura formed from Assam/UTs. **Hence option (b) is correct.**

1975: Sikkim became a state.

North-East & Post-1980s

1987: Arunachal Pradesh & Goa became states.

1990s: UTs of Delhi and Puducherry saw changes.

21st Century Formations

2000: Chhattisgarh (from MP), Uttarakhand (from UP), Jharkhand (from Bihar).

2014: Telangana formed from Andhra Pradesh.

2019: Jammu & Kashmir bifurcated into two UTs (J&K and Ladakh).

Other Developments

Tamil Nadu: Nov 1, 1956 (as Madras State).

Odisha (Orissa): Formed 1936, statehood 1950, renamed 2011.

Telangana: June 2, 2014.

Chhattisgarh: Nov 1, 2000.

PYQ REFERENCE: (2025)

Q. Consider the following pairs:

	State	Description
1	Arunachal Pradesh	The capital is named after a fort, and the State has two National Parks
2	Nagaland	The State came into existence on the basis of a Constitutional Amendment Act
3	Tripura	Initially a Part 'C' State, it became a centrally administered territory in 1956, and later attained full statehood

How many of the above pairs are correctly matched?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2216659®=3&lang=1>
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2216658®=3&lang=1>
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2216657®=3&lang=1>

8. Kuki-Zo

Q. With reference to the Kuki-Zo community, consider the following statements:

- They are an ethnic tribal group inhabiting the hill districts of Manipur and neighbouring states.
- They are recognised as Scheduled Tribes under the Constitution of India.
- They speak languages belonging to the Indo - Tibetan family.

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

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

Answer: (c) 3 only

Explanation:

In NEWS: Kuki-Zo Council reiterates its demand for a separate Union Territory for tribes

- Tribal organisations representing the Kuki-Zo community in Manipur held a mass rally reiterating their demand for a separate administrative arrangement, specifically a Union Territory (UT) with a legislature for areas predominantly inhabited by Kuki-Zo people.

Kuki-Zo Community:

- The **Kuki-Zo** are an **ethnic tribal group** inhabiting parts of **Manipur, Mizoram, Assam, and the Chin Hills of Myanmar**. **Hence statement 1 is correct.**

- In Manipur, the Kuki-Zo people predominantly reside in the **hill districts** such as Churachandpur, Kangpokpi, Tengnoupal, and parts of Chandel.

- The term "**Kuki-Zo**" is a collective identity encompassing several related tribes such as **Kuki, Zo, Zomi, and Chin** groups.

- They are recognised as **Scheduled Tribes** under the Constitution of India. **Hence statement 2 is correct.**

- The Kuki-Zo community traditionally follows **Christianity**, introduced largely during the colonial period by missionaries.

- Linguistically, they speak languages belonging to the **Tibeto-Burman family**. **Hence statement 3 is incorrect.**

- Historically, the Kuki-Zo tribes practiced **shifting cultivation (jhum)** in the hill regions.

- The community has distinct **customary laws and village-level governance systems** headed by chiefs.

- The Kuki-Zo inhabited areas form part of the **India - Myanmar border region**, giving them strategic and geopolitical significance.

PYQ REFERENCE: (2014)

Q. With reference to 'Changpa' community of India, consider the following statement:

- They live mainly in the State of Uttarakhand.
- They rear the Pashmina goats that yield a fine wool.
- They are kept in the category of Scheduled Tribes.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/news/national/manipur/after-rally-kuki-zos-stick-to-union-territory-demand/article70509635.ece>

9. Tulu Language

Q. Consider the following statements about Tulu Language:

- It belongs to the Dravidian language family.
- It is one of the 22 scheduled languages of India.
- It is one among the classical languages in India.

How many of the above statements is/are correct?

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

Answer: (a) Only one

Explanation:

In NEWS: Karnataka govt. in favour of declaring Tulu 2nd official language: Minister

- Tulu is a **Dravidian language** spoken primarily in Tulu Nadu, a region comprising the coastal districts of **Dakshina Kannada and Udupi in Karnataka, and the Kasaragod district in Kerala**. **Hence statement 1 is correct.**

- It is one of the oldest South Indian languages, with a history spanning approximately 2,000 to 3,000 years.
- While it is a highly developed language with a rich oral heritage, it is **not currently one of the 22 scheduled languages of India. Hence statement 2 is incorrect.**
- As of January 2026, the Karnataka government is actively considering declaring it the state's second official language.
- Historically, Tulu was written using the **Tigalari script** (also known as the Tulu-Tigalari script), which evolved from the Grantha script. Today, it is most commonly written using the **Kannada script**.
- There are several dialects categorized geographically (Northwest, Southwest, etc.) and socially (such as Brahmin and Common Tulu).
- Tulu is famous for its folk literature, including Paddanas (sung narratives) and traditional arts like Yakshagana and Bhuta Kola.
- Tulu language is **not one among the classical languages in India. Hence statement 3 is incorrect.**

PYQ REFERENCE: (2024)

Q. The Constitution (71st Amendment) Act, 1992 amends the Eighth Schedule to the Constitution to include which of the following languages?

1. Konkani
2. Manipuri
3. Nepali
4. Maithilis

Select the correct 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/karnataka/karnatak-a-govt-favourable-to-declaring-tulu-as-official-language-minister/article70561076.ece>

10. Service pensions in India

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

1. The service pensions of an employee in India falls under the concurrent list of the seventh schedule of the constitution of India.
2. The Parliament or President through rules has the authority to decide on the service pensions of an employee of the state government.

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: The middle path - The Assured Pension Scheme of Tamil Nadu is a good compromise

STATE PENSION: LEGAL PROVISIONS IN INDIA

Constitutional Basis

• **Legislative competence flows from:**

- **Article 309** – Power of Parliament/State Legislatures to regulate recruitment and service conditions of public servants.
- **Article 300A** – Pension recognized as a **property right** (cannot be taken away except by authority of law).

• **Directive Principles:**

- **Article 41** – Right to public assistance in old age (non-justiciable).

Concurrent List (List III), Seventh Schedule - Entries 23 & 24

- **Entry 23:** Social security and social insurance; employment and unemployment.
- **Entry 24:** Welfare of labour including conditions of work, provident funds, employers' liability, workmen's compensation, invalidity and old age pensions and maternity benefits.
- "Social security and welfare pensions fall under the Concurrent List, while service pensions are governed under Article 309."
- **Only welfare pensions** (old age, widow, disability pensions) fall under the Concurrent List. **Hence statement 1 is incorrect.**

Who decides pension in India:

Category of employee	Authority
Central Government employees	Parliament (or President through rules)
State Government employees	State Legislature (or Governor through rules)

Hence statement 2 is incorrect.

Nature of Pension (Judicial Interpretation)

- Pension is **not a bounty**, but a **deferred wage**.
- Key Supreme Court judgments:
 - **Deokinandan Prasad v. State of Bihar (1971):** Pension is a **property right** under Article 300A.
 - **D.S. Nakara v. Union of India (1983):** Pension is a **social welfare measure**; arbitrary classification among pensioners violates **Article 14**.
 - **State of Jharkhand v. Jitendra Kumar Srivastava (2013):** Pension cannot be withheld without statutory authority.
 - **Vijay Kumar v. Central Bank of India & Ors:** "Pension is a form of **property** under **Article 300A** of the Constitution and constitutes a constitutional right. It held that pension cannot be withheld or reduced without following due process of law, even in cases where the employee was compulsorily retired due to misconduct."

PYQ REFERENCE: (2008)

Q. Consider the following statements with reference to Indira Gandhi National Old Age Pension Scheme (IGNOAPS):

1. All persons of 60 years or above belonging to the households below poverty line in rural areas are eligible.
2. The Central Assistance under this Scheme is at the rate of ` 300 per month per beneficiary. Under the Scheme, States have been urged to give matching amounts.

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/opinion/editorial/the-middle-path-on-the-tamil-nadu-assured-pension-scheme/article70483264.ece>

11. Public Interest Litigation

Q. With reference to Public Interest Litigation (PIL) in India, consider the following:

A PIL can be filed in which of the following situations?

1. A Municipal Corporation for failure to manage solid waste
2. A State Government for permitting environmental degradation
3. A private industrial unit whose activities adversely affect public health

Select the correct answer using the code below:

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: Delhi HC seeks RBI's stand on PIL plea over data protection

Public Interest Litigation (PIL):

- Public Interest Litigation (PIL) is a special type of legal petition filed in Indian courts (Supreme Court or High Courts) to protect public interest, especially the rights of socially disadvantaged or marginalized groups even if the person filing it is not personally affected.
- It expands access to justice beyond the traditional rule that only directly affected parties could approach the court.
- PIL emerged in India in the **late 1970s-1980s through judicial activism, primarily shaped by Justices P.N. Bhagwati and V.R. Krishna Iyer.**
- It was developed to make justice accessible for those who, due to poverty, ignorance, disability, or social disadvantages, could not approach courts on their own.

PILs can be filed:

- In the Supreme Court under **Article 32** of the Constitution
- In the High Courts under **Article 226**
- Even in some cases under **Section 133 of the Criminal Procedure Code**, depending on the issue.

PILs may be brought against:

- Central Government
- State Governments
- Municipal or local authorities
- Even private parties (e.g., a polluting factory) if public welfare or rights are impacted.

Hence option (d) is correct.



Landmark PIL Cases in India

- Hussainara Khatoon v. State of Bihar (1979)**
 - Right to Speedy Trial under Article 21
 - Release of undertrial prisoners
- People's Union for Democratic Rights (PUDR) v. Union of India (1982)**
 - Non-payment of Minimum Wages (Article 23)
 - PIL through letters
- M.C. Mehta v. Union of India (Oleum Gas Leak, 1986)**
 - Principle of Absolute Liability
 - Environmental PIL Foundation
- Vishaka v. State of Rajasthan (1997)**
 - Vishaka Guidelines on Sexual Harassment
 - POSH Act, 2013
- D.K. Basu v. State of West Bengal (1997)**
 - Guidelines on Custodial Torture
 - Human Rights Protections (Article 21)
- Subhash Kumar v. State of Bihar (1991)**
 - Right to Pollution-Free Water & Air (Article 21)
 - Caution Against PIL Misuse

PYQ REFERENCE: (2012)

Q. Which of the following are included in the original jurisdiction of the Supreme Court?

1. A dispute between the Government of India and one or more States.
2. A dispute regarding elections to either House of the Parliament or that of Legislature of a State
3. A dispute between the Government of India and a Union Territory
4. A dispute between two or more States.

Select the correct answer using the codes given below:

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

Source: [https://www.thehindu.com/news/cities/Delhi/delhi-high-court-seeks-rbis-stand-on-data-protection-violation-by-digital-lending-apps/article70482631.ece#:~:text=The%20Delhi%20High%20Court%20on,NBFCs\)%20through%20digital%20lending%20applications.](https://www.thehindu.com/news/cities/Delhi/delhi-high-court-seeks-rbis-stand-on-data-protection-violation-by-digital-lending-apps/article70482631.ece#:~:text=The%20Delhi%20High%20Court%20on,NBFCs)%20through%20digital%20lending%20applications.)

12. National Intelligence Grid (NATGRID)

Q. With reference to the National Intelligence Grid (NATGRID), consider the following statements:

1. NATGRID is a statutory body created under the National Intelligence Grid (NATGRID) Act, 2009.
2. NATGRID is an integrated intelligence data-sharing platform that functions under the Ministry of Home Affairs.

3. NATGRID has the power to arrest, investigate, or prosecute the accused person.

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

Answer: (c) 2 only

Explanation:

In NEWS: 'Natgrid', the search engine of digital authoritarianism

NATGRID (National Intelligence Grid):

- NATGRID is an integrated intelligence data-sharing platform that enables authorised security and law-enforcement agencies to access multiple government databases through a single secure interface.
- NATGRID functions under the Ministry of Home Affairs, Government of India. **Hence statement 2 is correct.**
- NATGRID was conceived after the 2008 Mumbai terrorist attacks to address deficiencies in inter-agency intelligence coordination.
- NATGRID does not collect or generate primary data; it only aggregates, links, and analyses existing databases maintained by various government departments.
- Access to NATGRID is role-based, permission-controlled, and subject to audit trails, ensuring accountability in data usage.
- Authorised central intelligence and enforcement agencies are the primary users of NATGRID, and limited access has been extended to senior State police officers for investigation purposes.
- NATGRID integrates data relating to banking and financial transactions, telecommunications, travel and immigration, taxation, and crime records, among others.
- NATGRID is not a statutory body created by an Act of Parliament, but operates through executive authority of the Central Government. **Hence statement 1 is incorrect.**
- NATGRID is not an intelligence-gathering or surveillance agency and has no arrest, investigation, or prosecution powers. **Hence statement 3 is incorrect.**
- NATGRID became operational in 2020, after completion of its core technological infrastructure.
- NATGRID is intended primarily for counter-terrorism and serious crime prevention, including organised crime and economic offences.
- Concerns regarding privacy and data protection have been raised in relation to NATGRID due to the scale and sensitivity of the personal data accessible through the system.

Source: <https://www.thehindu.com/opinion/lead/natgrid-the-search-engine-of-digital-authoritarianism/article70483515.ece>

13. Unlawful Activities (Prevention) Act

Q. With reference to the Unlawful Activities (Prevention) Act (UAPA), consider the following statements:

1. The Unlawful Activities (Prevention) Act defines terrorism.
2. The act allows for prolonged detention without trial.

3. Section 43D(5) of UAPA restricts the grant of bail if the court finds reasonable grounds to believe that the accusation is prima facie true.

Which of the statements given above are correct?

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: Delay cannot be used as 'trump card' to secure bail: SC verdict

It says constitutional guarantees of personal liberty and life are not 'absolute' or 'unregulated', but subject to restrictions on bail under special statutes such as UAPA; court upholds the restrictions imposed on bail under Section 43D(5) of the UAPA

The Unlawful Activities (Prevention) Act :

- The Unlawful Activities (Prevention) Act (UAPA) has stringent provisions making bail difficult, primarily under Section 43D(5), which bars bail if the court finds "reasonable grounds" to believe accusations are prima facie true, effectively shifting the burden to the accused by requiring denial if the prosecution's case (from charge sheet/diary) seems plausible.
- Key conditions for bail denial include the court's satisfaction that the accused committed a terrorist act or belonged to a terrorist organization, and for non-citizens, unauthorized entry, with very exceptional bail only granted with recorded reasons.

Key Provisions of UAPA

- **Terrorist Act Definition:** Broadly defines acts intended to threaten India's sovereignty, unity, or strike terror, making it easier to classify activities as terrorism. **Hence statement 1 is correct.**
- **Extended Detention:** Allows for prolonged detention without trial; investigations can take longer, and courts cannot easily intervene. **Hence statement 2 is correct.**
- **National Investigation Agency (NIA):** Empowers the NIA to investigate terrorism cases, and courts rely heavily on the NIA's charge sheets for bail decisions.

Bail Conditions Under UAPA (Section 43D(5))

- **Prima Facie Truth:** Bail is denied if the court finds "reasonable grounds" to believe the accusation is "prima facie true" after reviewing the case diary and charge sheet. **Hence statement 3 is correct.**
- **Public Prosecutor's Opportunity:** The Public Prosecutor must be heard on any bail application.
- **Inverted Logic:** The standard is inverted; the court must deny bail if the accusation appears plausible, rather than granting it if it seems unlikely.
- **No Merits Review (Initially):** Courts generally cannot delve into the merits or demerits of the case at the initial bail stage, relying on the NIA's version.
- **For Non-Citizens:** Non-Indian citizens who entered illegally face a near-absolute bar on bail, requiring exceptional circumstances and recorded reasons for any release.

Impact on Bail

- **Difficulty in Securing Bail:** The "reasonable grounds" and "prima facie true" standards make it exceptionally hard to get bail, creating a significant hurdle for the accused.
- **Presumption of Guilt (in practice):** The law effectively operates with a presumption of guilt until proven innocent, contrasting with standard criminal law

PYQ REFERENCE:

Q. With reference to National Legal Services Authority, consider the following statements: [2013]

1. Its objective is to provide free and competent legal services to the weaker sections of the society on the basis of equal opportunity.
2. It issues guidelines for the State Legal Services Authorities to implement the legal programmes and schemes throughout 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.thehindu.com/news/national/delhi-riots-case-delay-cannot-be-used-as-a-trump-card-to-secure-bail-sc-reasons/article70473496.ece>

14. Padma Awards

Q. Consider the following statements in respect of Padma Awards:

1. The Government servants including those working with PSUs, except doctors and scientists, are not eligible for these Awards.
2. The awards are presented by the President of India every year on the occasion of Republic Day.
3. The Padma awards can be given to Indian nationals, while the NRI, foreigners, OCIs are not eligible for Padma awards.
4. The award does not amount to a title and can be used as a suffix or prefix to the awardees' name

Which of the statements given above is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: President Droupadi Murmu would confer Padma awards to 131 individuals in 2026

Padma Awards:

- Padma Awards - one of the highest civilian Awards of the country, are conferred in three categories, namely, **Padma Vibhushan, Padma Bhushan and Padma Shri.**
- The awards are announced on the occasion of Republic Day every year where the awardees are presented a Sanad (certificate) signed by the President and a medallion. **Hence statement 2 is correct.**

- 'Padma Vibhushan' is awarded for exceptional and distinguished service;
- 'Padma Bhushan' for distinguished service of high order and
- 'Padma Shri' for distinguished service in any field.

● Padma Awards, which were instituted in the year **1954**, are announced every year on the occasion of **Republic Day** except for brief interruption(s) during the years 1978 and 1979 and 1993 to 1997.

● All persons without distinction of race, occupation, position or sex are eligible for these awards. However, Government servants including those working with **PSUs**, except **doctors and scientists**, are **not eligible** for these Awards. **Hence statement 1 is correct.**

● The award seeks to recognize works of distinction and is given for distinguished and exceptional achievements/service in all fields of activities/disciplines. An illustrative list of the fields is as under:

○ Art (includes Music, Painting, Sculpture, Photography, Cinema, Theatre etc.)

○ Social work (includes social service, charitable service, contribution in community projects etc.)

○ Public Affairs (includes Law, Public Life, Politics etc.)

○ Science & Engineering (includes Space Engineering, Nuclear Science, Information Technology, Research & Development in Science & its allied subjects etc.)

○ Trade & Industry (includes Banking, Economic Activities, Management, Promotion of Tourism, Business etc.)

○ Medicine (includes medical research, distinction/specialization in Ayurveda, Homeopathy, Sidhha, Allopathy, Naturopathy etc.)

○ Literature & Education (includes Journalism, Teaching, Book composing, Literature, Poetry, Promotion of education, Promotion of literacy, Education Reforms etc.)

○ Civil Service (includes distinction/excellence in administration etc. by Government Servants)

○ Sports (includes popular Sports, Athletics, Adventure, Mountaineering, promotion of sports, Yoga etc.)

○ Others (fields not covered above and may include propagation of Indian Culture, protection of Human Rights, Wild Life protection/conservation etc.)

● The award is normally **not conferred posthumously**. However, in highly deserving cases, the Government could consider giving an award posthumously.

● A higher category of Padma award can be conferred on a person only where a period of **at least five years** has elapsed since conferment of the earlier Padma award. However, in highly deserving cases, a relaxation can be made by the Awards Committee.

● The recipients are also given a small replica of the medallion, which they can wear during any ceremonial/State functions etc., if the awardees so desire. The names of the awardees are published in the Gazette of India on the day of the presentation ceremony.

● The total number of awards to be given in a year (excluding posthumous awards and to **NRI/foreigners/OCIs**) should not be more than **120**. **Hence statement 3 is incorrect.**

● The award **does not amount to a title** and **cannot be used as a suffix or prefix** to the awardees' name. **Hence statement 4 is incorrect.**

Who decides

● The Padma Awards are conferred on the recommendations made by the Padma Awards Committee, which is constituted by the Prime Minister every year.

● The nomination process is open to the public. Even self-nomination can be made.

PYQ REFERENCE: (2021)

Q. Consider the following statements in respect of Bharat Ratna and Padma Awards:

1. Bharat Ratna and Padma Awards are titles under the Article 18(1) of the Constitution of India.
2. Padma Awards, which were instituted in the year 1954, were suspended only once.
3. The number of Bharat Ratna Awards is restricted to a maximum of five in a particular year.

Which of the above statements are not 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/news/national/full-list-of-padma-award-2026-winners/article70549263.ece>
<https://www.padmaawards.gov.in/PadmaAwards/AboutAwards>

15. Delimitation in India

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

1. Delimitation is the process of fixing or re-fixing the boundaries of territorial constituencies and determining the number of seats in the Lok Sabha and State Legislative Assemblies based on the geographical size of the state.
2. The Delimitation Commission of India is chaired by the President of India.
3. The constitution of India provides for readjustment of Lok Sabha constituencies after each Census through a Delimitation Act enacted by Parliament.

Which of the statements given above is/are correct?

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

Answer: (d) 3 only

Explanation:

In NEWS: Delimitation after 2027, redrawing power in India

Delimitation refers to the process of fixing or re-fixing the boundaries of territorial constituencies and determining the number of seats in the **Lok Sabha and State Legislative Assemblies** to ensure equal representation based on **population**. **Hence statement 1 is incorrect.**

Historical Evolution of Delimitation in India

1. **Pre-Independence Period:** Delimitation was carried out under the Government of India Acts of 1909, 1919, and 1935, primarily to allocate representation in legislative bodies.
2. **Post-Independence Phase:** After the adoption of the Constitution, delimitation was mandated under Articles 82 and 170.
3. **First Delimitation (1952):** Based on the 1951 Census, following the Delimitation Commission Act, 1952. Established constituencies for the first general elections.

4. Subsequent Delimitation Exercises: 1963 (1961 Census) and 1973 (1971 Census) adjusted boundaries and seats in line with population growth.

5. Freeze on Delimitation (1976): The 42nd Constitutional Amendment Act, 1976 froze the allocation of Lok Sabha and Assembly seats based on the 1971 Census until 2000, to encourage population control.

6. Post-2000 Developments

- a. The 84th Constitutional Amendment Act, 2001 extended the freeze till 2026, but allowed boundary readjustments.
- b. The 87th Constitutional Amendment Act, 2003 enabled delimitation using 2001 Census data without increasing seats.

7. Latest Delimitation (2002–2008): The Delimitation Commission (2002) completed the latest nationwide exercise, effective from 2008.

Constitutional Provisions

1. **Article 82 :** Provides for readjustment of Lok Sabha constituencies after each Census through a Delimitation Act enacted by Parliament. **Hence statement 3 is correct.**
2. **Article 170 :** Mandates delimitation of State Legislative Assembly constituencies based on population figures of the latest Census.
3. **42nd Constitutional Amendment Act, 1976 :** Froze delimitation based on the 1971 Census until the year 2000 to promote population control.
4. **84th Constitutional Amendment Act, 2001 :** Extended the freeze on the number of seats till 2026, while allowing readjustment of boundaries based on the 2001 Census.
5. **87th Constitutional Amendment Act, 2003 :** Permitted delimitation using the 2001 Census data without altering total seats.

Institutional Mechanism

- Delimitation is **carried out by an independent Delimitation Commission, appointed by the President of India.**
 - It consists of:
 - A retired Supreme Court judge as Chairperson. **Hence statement 2 is incorrect.**
 - The Chief Election Commissioner
 - The respective State Election Commissioners
 - The Commission's orders have the force of law and cannot be challenged in courts, ensuring political neutrality.

PYQ REFERENCE: (2024)

Q. How many Delimitation Commissions have been constituted by the Government of India till December 2023?

- (a) One
- (b) Two
- (c) Three
- (d) Four

Source: <https://www.thehindu.com/opinion/lead/delimitation-after-2027-redrawing-power-in-india/article70543757.ece>

16. National Sports Governance Act

Q. With reference to the National Sports Governance Act, consider the following statements:

1. All National Sports Bodies must have an Executive Committee of not more than 15 members.
2. Each Executive Committee must include at least two Sports persons of Merit (SOMs).

3. Affiliation with the National Sports Board (NSB) is mandatory for National Sports Federations to receive government funding.

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: National Sports Governance Act comes into effect partially

National Sports Governance Act:

- The **National Sports Governance Act** was notified on August 18 and has **partially come into force** following notification by the Central Government.
- The Act is described as the **largest sports governance reform** in India.
- The partial implementation enables the establishment of the **National Sports Board (NSB)** and the **National Sports Tribunal (NST)**.
- The Act applies to **National Sports Bodies**, including:
 - National Olympic Committee
 - National Paralympic Committee
 - National Sports Federations (NSFs)
 - Regional Sports Federations
- All National Sports Bodies must have an **Executive Committee of not more than 15 members. Hence statement 1 is correct.**
- Each Executive Committee must include **at least two Sportspersons of Merit (SOMs). Hence statement 2 is correct.**
- The **National Sports Board (NSB)** will be a **three-member body**.
- Members of the NSB are appointed by the **Central Government** based on recommendations of a **search-cum-selection committee**.
- The NSB will have the power to:
 - Grant affiliation to National Sports Federations
 - Monitor financial operations of NSFs
 - Penalise NSFs for violations
- **Affiliation with the NSB is mandatory** for National Sports Federations to receive **government funding. Hence statement 3 is correct.**
- The **age limit for NSB members** is **65 years**, with eligibility for **one reappointment** subject to the age cap.
- Members of the **National Sports Tribunal (NST)** will have a **four-year tenure** with an **age limit of 67 years**.
- A **National Sports Election Panel (NSEP)** will be constituted to conduct elections of sports bodies.
- The institutional mechanisms under the Act will become **fully operational from 1 January 2026**.
- Athletes entering sports administration must be **retired for at least one year**.
- Only athletes who have **won an Olympic medal or participated in the Olympics** are eligible for inclusion in the **National Olympic Committee**.
- For National Sports Federations, eligibility includes **National Sports Awards or World Championship medals**.

Source: <https://www.thehindu.com/news/national/national-sports-governance-act-comes-into-effect-partially/article70459495.ece>

17. Border Roads Organisation

Q. With reference to the Border Roads Organisation (BRO), consider the following statements:

1. BRO was established in 1960 to develop strategic infrastructure in border and remote areas.
2. BRO functions fully under the Ministry of Defence.
3. BRO undertakes infrastructure projects only within the Indian territory.

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: Border Roads Organisation: Connecting Places, Connecting People

Border Roads Organisation (BRO):

Establishment & Mandate:

- **Established on 7 May 1960**, the Border Roads Organisation (BRO) is India's premier agency for constructing and maintaining strategic roads, bridges, tunnels, and airfields in border and remote regions to meet defence and civilian needs. **Hence statement 1 is correct.**

Administrative Control:

- BRO functions fully under the **Ministry of Defence since 2015-16** (earlier partially under the Ministry of Road Transport and Highways). **Hence statement 2 is correct.**

Scale of Work:

- Since inception, BRO has constructed over 64,100 km of roads, 1,179 bridges, 7 tunnels, and 22 airfields **across border areas and friendly neighbouring countries. Hence statement 3 is incorrect.**

Strategic & Overseas Projects:

- BRO supports regional connectivity and diplomacy through projects in Bhutan (Project DANTAK), Myanmar, Afghanistan (Delaram-Zaranj Highway), and Tajikistan, strengthening India's strategic outreach.

Key Strategic Infrastructure:

- **Roads:** GS roads, DS-DBO Road, Srinagar-Leh highway
- **Tunnels:** Atal Tunnel, Sela Tunnel, Nechiphu Tunnel, Shyok Tunnel
- **Bridges:** Siyom Bridge, Sisseri Bridge, Devak Bridge
- **Airfields:** Bagdogra and Barrackpore (dual-use)

Disaster Response Role:

- BRO plays a vital role in Humanitarian Assistance and Disaster Relief (HADR) by clearing snowbound passes, restoring bridges, and reopening roads after floods, earthquakes, and avalanches.

Future Vision:

- Plans include 470 roads (≈27,300 km) and the Trans-Kashmir Connectivity Project (≈717 km) with multiple tunnels to ensure all-weather connectivity and enhance operational preparedness.

PYQ REFERENCE: (2014)

Q. Consider the following pairs:

National Highway : Cities connected

1. NH4 : Chennai and Hyderabad
2. NH 6 : Mumbai and Kolkata
3. NH 15 : Ahmedabad and Jodhpur

Which of the above pairs is/are correctly matched?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2215957®=3&lang=1>

SCHEMES

1. SAMPANN

Q. Consider the following statements regarding SAMPANN:

1. It is an online pension management system for Department of Telecommunications pensioners.
2. It allows direct pension disbursement into bank accounts.
3. Pension-related documents under SAMPANN are accessible through DigiLocker.

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: (d) 1, 2 and 3

Explanation:

In NEWS: SAMPANN: Transforming Pension Administration for DoT Pensioners through Digital Integration

SAMPANN – System for Accounting and Management of Pension

• SAMPANN stands for **System for Accounting and Management of Pension**.

• SAMPANN is an **integrated online pension management system** developed for **Department of Telecommunications (DoT) pensioners**. **Hence statement 1 is correct.**

• The platform provides a **single digital interface** for processing, sanctioning and disbursing pensions directly into the **bank accounts of pensioners**. **Hence statement 2 is correct.**

• SAMPANN enables **online grievance redressal**, digital profile management and access to complete transaction records.

• The system aims to improve **transparency, efficiency and accountability** in pension administration for telecom retirees.

• Under SAMPANN, key pension-related documents such as **Gratuity Payment Orders, Pension Certificates (ePPOs), Pension Commutation Payment Orders and Form 16** are made available digitally.

• These pension documents are now accessible through **DigiLocker**, ensuring secure storage and easy retrieval.

• Integration with DigiLocker supports the Government's vision of **digital governance and paperless public services**.

• DigiLocker-based access ensures **authenticity, long-term digital preservation and anytime-anywhere availability** of pension records. **Hence statement 3 is correct.**

• SAMPANN contributes to the broader objective of **Digital India** by leveraging digital platforms for citizen-centric service delivery.

PYQ REFERENCE:

Q. Consider the following statements with reference to Indira Gandhi National Old Age Pension Scheme (IGNOAPS): [2008]

1. All persons of 60 years or above belonging to the households below poverty line in rural areas are eligible.
2. The Central Assistance under this Scheme is at the rate of ` 300 per month per beneficiary. Under the Scheme, States have been urged to give matching amounts.

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=2211490®=3&lang=1>

2. Schemes for Farmers

Q. Consider the following schemes:

1. Pradhan Mantri-Rashtriya Krishi Vikas Yojana
2. Krishonnati Yojana
3. The National Mission on Natural Farming
4. The National Beekeeping and Honey Mission

How many of the above are considered central sector schemes?

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

Answer: (a) Only one

Explanation:

In NEWS: Govt to merge agricultural schemes, link funds to state reforms

The schemes that will be brought under Krishi Vikas Yojana are: Krishonnati Yojana to boost farmers' income, National Mission on Natural Farming (NMNF), and National Bee and Honey Mission (NBHM).

Pradhan Mantri-Rashtriya Krishi Vikas Yojana

• RKVY scheme was initiated in 2007 as an umbrella scheme for ensuring holistic development of agriculture and allied sectors by allowing states to choose their own agriculture and allied sector development activities as per the district/state agriculture plan.

• The scheme has come a long way since its inception and has been implemented across two plan periods (11th and 12th).

- Till 2013-14, the scheme was implemented as an Additional Central Assistance (ACA) to State Plan Scheme with 100% central assistance.
- It was converted into a **Centrally Sponsored Scheme** in 2014-15 also with 100% central assistance. Since 2015-16, the funding pattern of the scheme has been altered in the ratio of 60:40 between Centre and States (90:10 for North Eastern States and Himalayan States). For Union Territories the funding pattern is 100 % central grant.

Krishonnati Yojana:

- Krishonnati Yojana is an umbrella scheme of the Government of India, launched for the overall development of agriculture and allied sectors, with the main objective of ensuring food security, increasing farmers' income and achieving self-reliance in agriculture.
- It is a **centrally sponsored scheme**.
- It comprises several missions and sub-missions such as the National Food Security Mission (NFSM), Integrated Mission for Horticulture Development (MIDH), and Sub-Mission on Seeds and Planting Material (SMSP).
- The scheme focuses on improving the production, productivity and profitability of crops such as rice, wheat, pulses and oilseeds through various components.

The National Mission on Natural Farming (NMNF):

- The National Mission on Natural Farming (NMNF) is India's **centrally sponsored scheme** (approved Nov 2024) to promote ecosystem-based, chemical-free farming, aiming to improve soil health, build climate resilience, reduce costs, and increase farmer income by transitioning 7.5 lakh hectares to natural practices by creating 10,000 Bio-Input Resource Centers (BRCs) and training farmers through "Krishi Sakhis" and continuous handholding, with an outlay of ₹2,481 crore.
- It focuses on traditional methods like using cow dung/urine-based concoctions (Jeevamrut, Beejamrut) and mulching, fostering on-farm knowledge exchange for sustainable, profitable agriculture.

The National Beekeeping and Honey Mission (NBHM)

- The National Beekeeping and Honey Mission (NBHM) is a **Central sector** initiative implemented by the National Bee Board to promote scientific beekeeping in India.
- The mission aims to bring a "Sweet Revolution" by increasing honey and hive product production and strengthening beekeeping infrastructure such as laboratories and Integrated Beekeeping Development Centres (IBDCs).
- It supports research and development, quality control, and adoption of modern technologies to enhance productivity and sustainability of the beekeeping sector.
- NBHM focuses on empowering farmers, especially women, improving livelihoods, and ensuring better market access under the Atmanirbhar Bharat Abhiyaan.

Hence only one is correct.

PYQ REFERENCE: (1999)

Q. Which one of the following agricultural practices is eco-friendly?

- (a) Organic farming
- (b) Shifting cultivation
- (c) Cultivation of high yielding varieties
- (d) Growing plants in glass-houses

Source: <https://indianexpress.com/article/political-pulse/govt-to-merge-agricultural-schemes-link-funds-to-state-reforms-10468148/>

3. Design Linked Incentive Scheme

Q. The Design Linked Incentive (DLI) Scheme has been announced by:

- (a) Ministry of Commerce and Industry
- (b) Ministry of Electronics and Information Technology
- (c) NITI Aayog
- (d) Department of Science and Technology

Answer: (b) Ministry of Electronics and Information Technology

Explanation:

In NEWS: Design Linked Incentive Scheme - Catalyzing India's Semiconductor Design Ecosystem

Design Linked Incentive Scheme:

• **The Ministry of Electronics and Information technology** has announced the Design Linked Incentive Scheme to offset the disabilities in the domestic industry involved in semiconductor design in order to not only move up in value-chain but also strengthen the semiconductor chip design ecosystem in the country. **Hence option (b) is correct.**

• **Centre for Development of Advanced Computing**, India is responsible for implementation of the DLI Scheme as Nodal Agency.

Objective

• To attract large investments for setting up semiconductor wafer fabrication facilities in the country to strengthen the electronics manufacturing ecosystem and help establish a trusted value chain.

Eligibility

• Companies / Consortia / Joint Ventures proposing to set up a Silicon CMOS based Semiconductor Fab in India for manufacturing Logic / Memory / Digital ICs / Analog ICs / Mixed Signal ICs / SoCs

Tenure of the Scheme

• Support under the scheme shall be provided for a period of six years. The tenure of the actual fiscal support outflow may be extended based on the approval of the Minister of Electronics and Information Technology.

PYQ REFERENCE: (2018)

Q. Which one of the following best describes the term "Merchant Discount Rate" sometimes seen in news?

- (a) The incentive given by a bank to a merchant for accepting payments through debit cards pertaining to that bank.
- (b) The amount paid back by banks to their customers when they use debit cards for financial transactions for purchasing goods or services.
- (c) **The charge to a merchant by a bank for accepting payments from his customers through the bank's debit cards.**
- (d) The incentive given by the Government to merchants for promoting digital payments by their customers through Point of Sale (PoS) machines and debit cards.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2211220®=3&lang=1>

4. Nutrient-Based Subsidy (NBS) Scheme

Q. Under the NBS Scheme, subsidies are provided based on the content of which of the following nutrients?

1. Nitrogen
2. Phosphorus
3. Potassium
4. Sulphur

Select the correct answer using the code below:

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

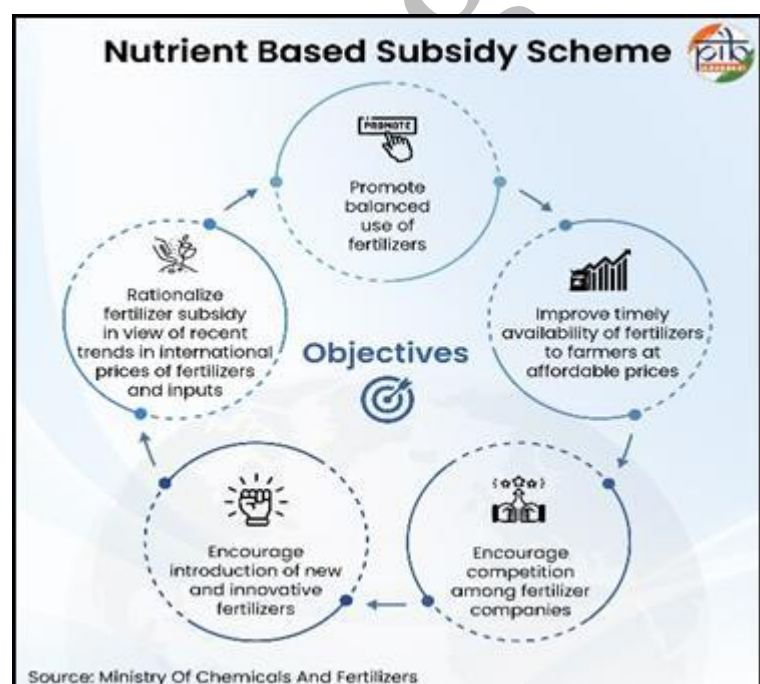
Answer: (c) 1, 2, 3 and 4

Explanation:

In NEWS: Supporting Balanced Fertilization: Nutrient-Based Subsidy Rates for Rabi 2025-26

- The Nutrient-Based Subsidy (NBS) Scheme of the **Ministry of Chemicals and Fertilizers** aims to promote the balanced use of essential nutrients, such as **nitrogen, phosphorus, potassium, and sulphur**, thereby helping farmers avoid over-dependence on any single fertilizer and maintain soil health while improving productivity. **Hence all are correct.**

- It ensures that fertilizers are **available to farmers on time** and at affordable, subsidized prices, which is vital for smooth crop planning.
- The scheme also fosters **healthy competition among fertilizer companies**, driving improvements in quality, innovations, and efficiency in the fertilizer market.
- Under the Nutrient-Based Subsidy (NBS) Scheme, the government provides a **fixed subsidy, revised annually or biannually, on Phosphatic and Potassic (P&K) fertilizers, including DAP**. The subsidy amount is linked to the nutrient composition of each fertilizer grade.
- Under the NBS Scheme, the P&K fertilizer sector operates under a decontrolled regime, **allowing companies to set the Maximum Retail Price (MRP) at reasonable levels**, subject to government oversight.



PYQ REFERENCE: (2017)

Q. Consider the following statements

The nation-wide 'Soil Health Card Scheme' aims at

1. expanding the cultivable area under irrigation.
2. enabling the banks to assess the quantum of loans to be granted to farmers on the basis of soil quality.
3. checking the overuse of fertilizers in farmlands.

Which of the above statements is/are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2211384®=3&lang=1>

5. SPREE 2025

Q. Which of the following categories of workers are expected to benefit directly from SPREE 2025?

1. Informal sector workers
2. Contract and casual labour
3. Gig and platform workers
4. Government servants

Select the correct answer using the code below:

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

Answer: (a) 1, 2 and 3 only

Explanation:

In NEWS: SPREE 2025 Extended Till 31 January 2026: ESIC Offers More Time for Employers to Join Without Past Liabilities

The Scheme for Promotion of Registration of Employers and Employees (SPREE 2025):

- **SPREE 2025** is a special drive launched by the **Employees' Provident Fund Organisation (EPFO)**.
- The initiative aims to **expand social security coverage** by enrolling unregistered establishments and workers.
- It follows a **voluntary and non-punitive approach**, encouraging compliance rather than imposing penalties.
- The scheme focuses on coverage under the **Employees' Provident Fund (EPF)**.
- **Informal, contract, casual, and gig workers** are among the intended beneficiaries. **Hence 1, 2 and 3 are correct.**
- The initiative supports the objectives of the **Code on Social Security, 2020**.
- SPREE 2025 contributes to India's goal of **universal social security**.
- It is implemented nationwide through EPFO field offices and digital platforms.

PYQ REFERENCE: (2016)

Q. Pradhan Mantri MUDRA Yojana is aimed at

(a) bringing the small entrepreneurs into formal financial system

- (b) providing loans to poor farmers for cultivating particular crops
- (c) providing pensions to old and destitute persons
- (d) funding the voluntary organizations involved in the promotion of skill development and employment generation

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210119®=3&lang=1>

6. Atal Pension Yojana

Q. With reference to Atal Pension Yojana (APY), consider the following statements:

- I. It is an old age income security scheme for a savings account holder in the age group of 18-60 years who is not an income tax-payee.
- II. Each subscriber under APY shall receive a guaranteed minimum pension after the age of 60 years until death.
- III. Same amount of pension is guaranteed for the spouse for life after subscriber's death.
- IV. Subscriber contribution to APY shall be made through the facility of 'auto-debit' of the prescribed contribution amount from the savings bank account of the subscriber

Which of the statements given above are correct?

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

Answer: (d) II, III and IV

Explanation:

In NEWS: Cabinet approves continuation of Atal Pension Yojana (APY) and extension of funding support for promotional and developmental activities and gap funding till 2030-31

Atal Pension Yojana (APY):

- Atal Pension Yojana (APY) is an old age income security scheme for a savings account holder in the age group of 18-40 years who is not an income tax-payee. **Hence statement I is incorrect.**
- The scheme helps in addressing the longevity risks among the workers in the unorganized sector and encourages the workers to voluntarily save for their retirement.
- The scheme is mainly targeted at the poor, the under-privileged and workers in the unorganized sector.
- Contributions to the Atal Pension Yojana (APY) are eligible for tax benefits similar to the National Pension System (NPS) under section 80CCD(1).

Eligibility

- The minimum age of joining APY is 18 years and maximum is 40 years.
- The age of exit and start of pension is 60 years.

- Subscriber contribution to APY shall be made through the facility of 'auto-debit' of the prescribed contribution amount from the savings bank account of the subscriber on monthly, quarterly or half-yearly basis. **Hence statement IV is correct.**

- The subscribers are required to contribute the prescribed contribution amount from the age of joining APY till the age of 60 years.

Benefits

Upon exit on attaining 60 years, The subscriber shall receive the following three benefits on attaining the age of 60:

(i) Guaranteed minimum pension amount: Each subscriber under APY shall receive a guaranteed minimum pension of Rs. 1000/- per month or Rs. 2000/- per month or Rs. 3000/- per month or Rs. 4000/- per month or Rs. 5000/- per month, after the age of 60 years until death. **Hence statement II is correct.**

(ii) Guaranteed minimum pension amount to the spouse: After the subscriber's demise, the spouse of the subscriber shall be entitled to receive the same pension amount as that of the subscriber, until death.

Hence statement III is correct.

(iii) Return of the pension wealth to the nominee of the subscriber: After the demise of both the subscriber and the spouse, the nominee of the subscriber shall be entitled to receive the pension wealth, as accumulated till the subscriber's age of 60 years.

Voluntary exit (Exit before 60 Years of age):

- The subscriber shall be refunded only the contributions made by him to APY alongwith the net actual accrued income earned on his contributions (after deducting the account maintenance charges).
- However, in case of subscribers who joined the scheme before 31st March 2016 and have received the Government Co-Contribution, shall not receive the same including the accrued income earned thereon.

For death before 60 years

Option 1: In case of death of the subscriber before 60 years, option will be available to the spouse of the subscriber to continue contribution in the APY account of the subscriber, which can be maintained in the spouse's name, for the remaining vesting period, till the original subscriber would have attained the age of 60 years. The spouse of the subscriber shall be entitled to receive the same pension amount as the subscriber until death of the spouse. Such APY account and pension amount would be in addition even if the spouse has his/her APY account and pension amount in own name.

Option 2: The entire accumulated pension corpus till date under APY will be returned to the spouse / nominee.

PYQ REFERENCE: (2016)

Q. Regarding 'Atal Pension Yojana', which of the following statements is/are correct?

1. It is a minimum guaranteed pension scheme mainly targeted at unorganized sector workers.
2. Only one member of a family can join the scheme.
3. Same amount of pension is guaranteed for the spouse for life after subscriber's death.

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.pib.gov.in/PressReleasePage.aspx?PRID=2216727®=3&lang=1>

7. Sukanya Samridhi Yojana

Q. With reference to Sukanya Samridhi Yojana, consider the following statements:

1. It is a government-backed small savings scheme launched under the "Beti Bachao, Beti Padhao" campaign in 2015.
2. Sukanya Samridhi Yojana account can be opened at any India Post office or branch of any Public Sector Bank only and is transferable to any location within India.
3. Investments made under the scheme qualify for tax benefits under Section 80C of the Income Tax Act, 1961.

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: (c) 1 and 3 only

Explanation:

In NEWS: From Savings to Strength: Empowering India's Girls Through Sukanya Samridhi Yojana

Sukanya Samridhi Yojana:

- Sukanya Samridhi Yojana (SSY) is a government-backed small savings scheme launched under the "Beti Bachao, Beti Padhao" campaign in 2015. **Hence statement 1 is correct**
- It is designed specifically to build a fund for a girl child's future education and marriage expenses.
- Parents or legal guardians can open an account for their Indian girl child at any India Post office or branch of any Public Sector Bank and authorised Private Sector Banks (HDFC Bank, Axis Bank, ICICI Bank and IDBI Bank). **Hence statement 2 is incorrect**
- The account may be opened anytime from the birth of the girl child until she attains the age of 10 years.
- **Only one Sukanya Samridhi Yojana account is permitted per girl child**, and a family can open accounts for a maximum of two girl children.
- However, **more than two accounts are allowed in cases of twins or triplets**, subject to submission of an affidavit along with the relevant birth certificates.
- The account is **transferable to any location within India**.
- Notably, the account is managed by the parent/ guardian until the girl child reaches the age of eighteen.
- This allows the guardian to oversee the savings and ensure that the funds are utilized effectively for the child's education and future needs.
- **Upon turning eighteen, the account holder can take control of the account herself** by submitting the necessary documents.
- Parents and guardians can start with a **minimum initial deposit of ₹250** in the SSY account, and subsequent deposits can be made in multiples of ₹50, provided that at least ₹250 is deposited in a financial year.
- The **total annual deposit limit is capped at ₹1,50,000**- any excess amount will not earn interest and will be returned.

- Deposits can be made for a period of up to fifteen years from the account opening date.
- Calculated every month, the interest is added to the account at the end of each financial year.
- An account holder may withdraw up to 50% of the balance available at the end of the preceding financial year for educational purposes. This facility becomes available once the account holder attains the age of eighteen or passes the tenth standard, whichever occurs earlier.
- Investments made under the scheme qualify for **tax benefits under Section 80C of the Income Tax Act, 1961. Hence statement 3 is correct.**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2216748®=3&lang=1>

8. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0

Q. With reference to the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0, Consider the following statements.

1. It is a centrally sponsored scheme implemented by the Ministry of Skill Development and Entrepreneurship (MSDE).
2. It offers short-term training (STT) and reskilling and upskilling through Recognition of Prior Learning (RPL).
3. It includes new age courses for industry 4.0 like coding, AI, robotics, mechatronics, IoT, 3D printing, and drones.

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

Answer: (c) 2 and 3 only

Explanation:

In NEWS: Tall talk on skilling, poor outcomes: Why Sector Skill Councils need to be held accountable

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0:

- It is a scheme that provides skill training to young people in India. The scheme is implemented by the Ministry of Skill Development and Entrepreneurship (MSDE).
- PMKVY 4.0 has been implemented as a **Central Sector Scheme** since 2022-23. **Hence statement 1 is incorrect.**
- There is no state managed component in PMKVY 4.0.
- It offers short-term training (STT) and reskilling and upskilling through Recognition of Prior Learning (RPL). **Hence statement 2 is correct.**
- It aims to provide skill development training that is aligned with the National Skill Qualification Framework (NSQF).
- It targets people between the ages of 15 and 59.
- It includes new age courses for industry 4.0 like coding, AI, robotics, mechatronics, IoT, 3D printing, and drones. **Hence statement 3 is correct.**
- It also includes soft skills to prepare young people for international opportunities.

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.thehindu.com/education/heres-why-worlds-largest-skilling-system-has-delivered-marginal-increase-in-skilled-workforce/article70456051.ece>

9. Paripoorna Mediciam Ayush Bima

Q. With reference to Paripoorna Mediciam Ayush Bima, consider the following statements:

1. The scheme is available only to Central Government Health Scheme (CGHS) beneficiaries.
2. It is offered through the Life Insurance Corporation of India.
3. The scheme provides 100% coverage for in-patient hospitalisation under Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy.

Which of the statements given above are correct?

- (a) 1 and 2 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: Govt launches Paripoorna Mediciam Ayush Bima offering cashless and modern treatments for CGHS beneficiaries

Paripoorna Mediciam Ayush Bima

- The **Department of Financial Services** has recently issued a circular announcing a new optional health insurance scheme called "Paripoorna Mediciam Ayush Bima" for Central Government Health Scheme (CGHS) beneficiaries.
- The scheme promises cashless hospitalisation, insurance cover of ₹10 lakh or ₹20 lakh, pre- and post-hospitalisation benefits, coverage for modern treatments and AYUSH therapies, and even no-claim Bonuses.
- It is **available only to CGHS beneficiaries** (serving employees and pensioners). **Hence statement 1 is correct.**
- The scheme is offered through **New India Assurance Company Limited**. **Hence statement 2 is incorrect.**
- It can be purchased online via the New India Assurance website or at designated government offices.

Key Features and Benefits (2026)

- **Sum Insured Options:** Beneficiaries can choose a coverage amount of ₹10 lakh or ₹20 lakh.
- **Coverage for Treatments:**
 - **AYUSH Treatments:** 100% coverage for in-patient hospitalisation under Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy. **Hence statement 3 is correct.**
 - **Modern Treatments:** Base coverage for modern medical procedures is capped at 25% of the sum insured, but an optional rider can extend this to 100%.
 - **Family Floater:** A single policy can cover up to six family members, including serving employees, pensioners, and their eligible dependents.
- **Cost & Savings:**
 - **0% GST:** The policy is exempt from GST to ensure affordability.
 - **Discounts:** Offers premium discounts of up to 42% compared to standard retail plans.
 - **Cumulative Bonus:** A 10% bonus for every claim-free year, up to a maximum of 100%.
 - **Co-Payment Options:** Subscribers can choose between 70:30 or 50:50 co-sharing options with the insurer.

PYQ REFERENCE: (2022)

Q. With reference to Ayushman Bharat Digital Mission, consider the following statements:

1. Private and public hospitals must adopt it.
2. As it aims to achieve universal health coverage, every citizen of India should be part of it ultimately.
3. It has seamless portability across the country.

Which of the statements given above is/are correct?

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

Source: <https://www.newsonair.gov.in/govt-launches-paripoorna-mediciam-ayush-bima-offering-cashless-and-modern-treatments-for-cghs-beneficiaries/>

10. Sampoonata Abhiyan 2.0

Q. Which one of the following best describes the aim of Sampoonata Abhiyan 2.0?

- (a) To reduce maternal and neonatal mortality among poor pregnant women.
(b) To achieve 100% literacy by promoting collaboration between voluntary organizations and the government's education system and local communities.
(c) To achieve 100% saturation of selected development indicators in Aspirational Districts and Blocks through convergence and monitoring
(d) To provide additional financial assistance to States for social sector development

Answer: (c) To achieve 100% saturation of selected development indicators in Aspirational Districts and Blocks through convergence and monitoring

Explanation:

In NEWS: Launch of Sampoonata Abhiyan 2.0 by NITI Aayog

Sampoornata Abhiyan 2.0:

- Sampoornata Abhiyan 2.0 is a **time-bound national campaign** launched by **NITI Aayog**.
- The campaign aims at achieving **100% saturation of key development indicators** in lagging regions. **Hence option (c) is correct.**
- It covers **Aspirational Districts as well as Aspirational Blocks** across India.
- Sampoornata Abhiyan 2.0 is implemented for a **three-month duration**.
- The campaign is aligned with the goals of the **Aspirational Districts Programme (ADP)** and **Aspirational Blocks Programme (ABP)**.
- Key focus sectors under the campaign include **health, nutrition, education, sanitation, and animal welfare**.
- At the district level, indicators such as **birth weight recording, TB case notification, and school toilet facilities** are monitored.
- At the block level, emphasis is placed on **Anganwadi services, supplementary nutrition, drinking water, sanitation, and vaccination of cattle**.
- The campaign follows a **saturation-based approach**, rather than incremental improvement.
- Implementation involves **district and block-level action plans**, supported by **monthly monitoring and data-driven review mechanisms**.
- Sampoornata Abhiyan 2.0 promotes **convergence of Central schemes, State initiatives, and local administration efforts**.
- It strengthens **last-mile service delivery** through intensive field-level monitoring.
- The campaign reflects the principles of **cooperative federalism and competitive federalism**.
- NITI Aayog acts as a **facilitator and performance monitor**, not an implementing agency.

PYQ REFERENCE: (2017)

Q. What is the aim of the programme 'Unnat Bharat Abhiyan'?

- Achieving 100% literacy by promoting collaboration between voluntary organizations and government's education system and local communities.
- Connecting institutions of higher education with local communities to address development challenges through appropriate technologies.**
- Strengthening India's scientific research institutions in order to make India a scientific and technological power.
- Developing human capital by allocating special funds for health care and education of rural and urban poor, and organizing skill development programmes and vocational training for them.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2219753®=3&lang=1>

<https://www.newsonair.gov.in/niti-aayog-launches-sampoornata-abhiyan-2-0-to-accelerate-development-across-aspirational-districts-blocks/>

11. PM E-DRIVE Scheme

Q. With reference to the PM E-DRIVE Scheme, consider the following statements:

1. It is a central sector scheme aimed at accelerating the adoption of electric mobility in India.

2. It covers electric two-wheelers, three-wheelers, buses, and commercial vehicles.
3. It is implemented by the Ministry of Power.

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: (b) 2 only

Explanation:

In NEWS: Target for e-3Ws (L5) achieved under PM E-DRIVE Scheme - A milestone in e-mobility for Govt. of India

PM E-DRIVE Scheme:

1. **PM E-DRIVE Scheme** stands for **Prime Minister's Electric Drive Revolution in Innovative Vehicle Enhancement**.
2. It is a **centrally sponsored scheme** aimed at accelerating the adoption of **electric mobility** in India. **Hence statement 1 is incorrect.**
3. The scheme focuses on **demand incentives** for electric vehicles as well as **support for charging infrastructure**.
4. It covers **electric two-wheelers, three-wheelers, buses, and commercial vehicles**. **Hence statement 2 is correct.**
5. The scheme places special emphasis on **public transport and shared mobility** to reduce carbon emissions.
6. It encourages **domestic manufacturing** of electric vehicle components in line with **Atmanirbhar Bharat**.
7. PM E-DRIVE is implemented by the **Ministry of Heavy Industries**. **Hence statement 3 is incorrect.**
8. The scheme aims to reduce **oil import dependence** and **vehicular air pollution**.
9. It aligns with India's commitments under the **Nationally Determined Contributions (NDCs)** and climate goals.
10. PM E-DRIVE succeeds and rationalises incentives provided under earlier electric mobility initiatives.

PYQ REFERENCE: (2016)

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

- Providing technical and financial assistance to start-up entrepreneurs in the field of renewable sources of energy
- Providing electricity to every household in the country by 2018
- Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time.
- Providing for financial turnaround and revival of power distribution companies**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210125®=3&lang=1>

12. The SAMAR initiative

Q. With reference to SAMAR initiative, consider the following statements:

1. It is a certification developed by DRDO in collaboration with the Quality Council of India (QCI).
2. It aims to strengthen the defence manufacturing ecosystem by encouraging innovation and adherence to high-quality standards.

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: MINISTRY OF DEFENCE; YEAR END REVIEW - 2025

SAMAR:

- SAMAR is a certification developed by the **Defence Research and Development Organisation (DRDO)** in collaboration with the **Quality Council of India (QCI)**. **Hence statement 1 is correct.**
- It serves as a **benchmark to evaluate and enhance the capabilities** of defence manufacturing enterprises.
- The initiative aims to **strengthen the defence manufacturing ecosystem** in India.
- SAMAR encourages **innovation and research** in defence production.
- It ensures **adherence to high-quality standards** for DRDO-developed defence systems. **Hence statement 2 is correct.**
- The certification can be obtained by **public and private defence manufacturers** meeting the prescribed quality and innovation criteria.
- SAMAR aligns with the **Atmanirbhar Bharat initiative** by boosting indigenous defence capabilities.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210154®=3&lang=1>

13. SAMPANN

Q. With reference to SAMPANN (System for Accounting and Management of Pension), consider the following statements:

1. It enables end-to-end digitisation of the pension lifecycle, including issuance of electronic Pension Payment Orders.
2. SAMPANN is an initiative of the Ministry of Finance for pension disbursement of all Central Government employees.

Which of the statements given above 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: SAMPANN pension portal developed by Office Of Controller General of Communication Accounts, integrates with UMANG Portal

About SAMPANN:

• **SAMPANN (System for Accounting and Management of Pension)** is a flagship digital platform for pension administration of the **Department of Telecommunications**.

• The platform is **developed, owned, and operated** by the **Office of the Controller General of Communication Accounts (CGCA)**. **Hence statement 2 is incorrect.**

• SAMPANN was **dedicated to the nation on 29 December 2018** by the **Prime Minister of India**.

• It aims to shift from **system-centric administration to pensioner-centric governance**.

• SAMPANN digitises the **entire pension lifecycle**, from initiation of pension cases to **disbursement, accounting, reconciliation, audit, and grievance redressal**. **Hence statement 1 is correct.**

• Under SAMPANN, **Pension Payment Orders are issued electronically (e-PPOs)**.

• Pension payments under SAMPANN are **credited directly to pensioners' bank accounts**, eliminating the need to visit banks or government offices.

• Pensioners can **submit life certificates online** and **track pension payment status** through the SAMPANN portal.

• The platform allows pensioners to **update personal details** such as mobile number and address digitally.

• SAMPANN includes **online grievance redressal mechanisms** and is supported by **toll-free helplines** for pensioners.

PYQ REFERENCE: (2016)

Q. Regarding 'Atal Pension Yojana', which of the following statements is/are correct?

1. It is a minimum guaranteed pension scheme mainly targeted at unorganized sector workers.
2. Only one member of a family can join the scheme.
3. The same amount of pension is guaranteed for the spouse for life after the subscriber's death.

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.pib.gov.in/PressReleasePage.aspx?PRID=2216904®=3&lang=1>

14. PANKHUDI

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

1. It is a single-window integrated digital portal to strengthen partnerships and facilitate contributions for women and child development initiatives across India.
2. It is launched by the Ministry of Electronics and Information Technology (MeitY).

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: Ministry of Women and Child Development launches PANKHUDI – an Integrated Digital Portal to Strengthen Partnerships for Women and Child Development

- **PANKHUDI** is a **single-window, integrated digital portal** launched by the **Ministry of Women and Child Development** to strengthen partnerships and facilitate contributions for women and child development initiatives across India. **Hence statements 1 is correct and 2 is incorrect.**

- It enables **coordination and structured participation** of stakeholders such as individuals, Non-Resident Indians (NRIs), NGOs, corporate entities, CSR contributors, and government agencies on one platform.

- The portal streamlines **voluntary and CSR contributions** across priority areas including **nutrition, health, Early Childhood Care and Education (ECCE), child welfare and protection, and women's safety and empowerment.**

- Users can **register, identify priority initiatives, submit proposals, and track progress** through clearly defined digital workflows, promoting **transparency and accountability.**

- **All contributions are accepted only through non-cash modes** to ensure traceability and financial transparency.

- PANKHUDI supports the implementation of key flagship missions of the Ministry such as **Mission Saksham Anganwadi & Poshan 2.0, Mission Vatsalya, and Mission Shakti** by providing a **technology-enabled convergence mechanism.**

PYQ REFERENCE: (2017)

Q. What is the aim of the programme 'Unnat Bharat Abhiyan'?

(a) Achieving 100% literacy by promoting collaboration between voluntary organizations and government's education system and local communities.

(b) Connecting institutions of higher education with local communities to address development challenges through appropriate technologies.

(c) Strengthening India's scientific research institutions in order to make India a scientific and technological power.

(d) Developing human capital by allocating special funds for health care and education of rural and urban poor, and organizing skill development programmes and vocational training for them.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2212400®=3&lang=1>

15. Tex - RAMPS scheme

Q. Which of the following statements about the Tex-RAMPS scheme are correct?

1. Tex-RAMPS is a Central Sector Scheme fully funded by the Ministry of Textiles.

2. The scheme aims to boost research, innovation, data systems, planning and competitiveness in the Indian textile industry.

Select the answer using the code given below:

- (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: Textiles ministry signs MoUs with 15 States under Tex-RAMPS scheme

Tex-RAMPS Scheme (Textiles Focused Research, Assessment, Monitoring, Planning and Start-up):

- **Tex-RAMPS** is a **Central Sector Scheme** approved by the **Government of India** and fully funded by the **Ministry of Textiles** to strengthen India's textiles and apparel sector. **Hence statements 1 is correct.**

- The full form of the scheme is **Textiles Focused Research, Assessment, Monitoring, Planning and Start-up.**

- It has a **total outlay of ₹305 crore** and will be implemented over **FY 2025-26 to FY 2030-31**, aligned with the Finance Commission cycle.

- The scheme aims to **boost research, innovation, data systems, planning and competitiveness** in the Indian textile industry, addressing critical gaps in these areas. **Hence statements 2 is correct**

- A major focus is on **advanced research** in areas such as **smart textiles, sustainability, process efficiency and emerging technologies** to enhance innovation capacity.

- It will develop **robust data and analytics systems**, including an **Integrated Textiles Statistical System (ITSS)** for real-time monitoring and evidence-based decision-making.

- The scheme also focuses on **capacity building, State-level planning support, knowledge sharing, and dissemination of best practices** across the sector.

- **Start-up and innovation support** is an important component, promoting incubators, hackathons, and academia-industry collaboration to nurture textile sector start-ups.

- The initiative is expected to **improve global competitiveness, create employment opportunities**, and strengthen collaboration among industry, academia, government, and States.

PYQ REFERENCE: (2024)

Q. With reference to the Digital India Land Records Modernisation Programme, consider the following statements:

1. To implement the scheme, the Central Government provides 100% funding.

2. Under the Scheme, Cadastral Maps are digitised.

3. An initiative has been undertaken to transliterate the Records of

Rights from local language to any of the languages recognized by the Constitution of India.

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/textile-ministry-signs-mous-with-15-states/article70487513.ece>

SCIENCE & TECHNOLOGY

1. Braille

Q. Consider the following statements:

- I. The Braille script was introduced in India in 1887.
- II. Braille is based on a six-dot cell, arranged in two columns of three dots each.
- III. Bharati Braille is a single national code enabling multiple Indian languages to be read and written.
- IV. India is a State Party to the UN Convention on the Rights of Persons with Disabilities (UNCRPD).

Which of the statements given above is/are correct?

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

Answer: (d) I, II, III and IV

Explanation:

In NEWS: World Braille Day, observed annually on 4th January.

Braille in India:

- The Braille script was introduced in India in **1887**. **Hence statement I is correct.**
- But, in 1951, a single national standard, Bharati Braille, was adopted with the common codes for Indian languages. **Hence statement III is correct.**
- According to the 2011 Census, there are 50,32,463 persons with visual impairment in India, who face significant barriers in accessing healthcare, education, and employment.
- Recognising the needs of this population, Braille in India is embedded in a rights-based ecosystem anchored in initiatives, acts and policies like the Rights of Persons with Disabilities Act, 2016, and the National Education Policy (NEP) 2020 and others.
- India, as a State Party to the **UN Convention on the Rights of Persons with Disabilities (UNCRPD)**, is committed to ensuring access to information and education in accessible formats, including Braille. **Hence statement IV is correct.**

Braille:

- Braille is a tactile writing and reading system used by people who are blind or have low vision.
- It is based on a **six-dot cell, arranged in two columns of three dots each**. Different combinations of raised dots represent letters,

numerals, punctuation marks and symbols, enabling users to read through touch. **Hence statement II is correct.**

- Braille (named after its inventor in 19th century France, Louis Braille) is **not a language but a code** that allows multiple languages to be read and written in tactile form.

Braille Ecosystem in India:

Legal

- **RPwD Act, 2016** → Right to Braille, inclusive education, free Braille books (≤18 yrs)

Standardisation

- **Bharati Braille** → Unified six-dot script for Indian languages
- **Unicode mapped** (Jan 2025)
- **Draft Bharati Braille 2.1** → World Braille Day 2026

Accessibility

- **Accessible India Campaign (2015)**
- Built environment | Transport | ICT
- Braille signage in **2000+ railway stations**

Education

- **NEP 2020** → Braille & large-print textbooks
- **NCERT** → Accessible textbook development

Higher Education & Digital

- **DALM Project (under SIPDA)** → Free Braille/accessible material
- **Suganya Pustakalaya** → National digital library (Braille, DAISY)

Coverage

- **1.69 lakh+ beneficiaries** since 2014 (DALM)

Institutions

- **NIEPVD, Dehradun** → Training & standards
- **RCI (1992 Act)** → Regulates rehab professionals
- **Braille Presses & Resource Centres** → MSJE network

PYQ REFERENCE:

Q. The term 'Apabhramsa' was used in medieval Sanskrit texts to denote: [1996]

- (a) outcastes among the Rajputs
- (b) deviations from Vedic rituals
- (c) early forms of some of the modern Indian language**
- (d) non-Sanskrit verse metres

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2211217®=3&lang=1>

2. Remote-sensing

Q. Which of the following are applications of remote sensing?

- 1. It helps in monitoring vegetation health and crop conditions
- 2. It supports surface water mapping
- 3. It assists in assessing water quality, including turbidity and algal blooms in lakes and coastal waters.
- 4. It supports national security and border surveillance

Select the answer using the code given below:

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

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

Explanation:

In NEWS: What remote-sensing reveals about plants, forests, and minerals from spaceThe United States has its eyes on the vast mineral wealth of Venezuela

Remote sensing

- Remote sensing is the science of collecting information about the Earth's surface **without direct physical contact**, using satellites, aircraft, or drones. It works by detecting **electromagnetic radiation** reflected or emitted by objects.

Applications of Remote Sensing:

- Remote sensing is used to **map land use and land cover** over large areas with high accuracy.
- It helps in monitoring **vegetation health and crop conditions** using indices such as the Normalised Difference Vegetation Index (NDVI). **Hence statement 1 is correct.**
- Remote sensing enables **forest mapping**, identification of deforestation, and estimation of forest biomass and carbon stock.
- It is used to **detect drought stress** in crops and natural vegetation at an early stage.
- Remote sensing supports **surface water mapping** using indices such as the Normalised Difference Water Index (NDWI). **Hence statement 2 is correct.**
- Synthetic Aperture Radar (SAR)** is used for **flood mapping** and disaster monitoring under cloudy and night-time conditions.
- Remote sensing assists in assessing **water quality**, including turbidity and algal blooms in lakes and coastal waters. **Hence statement 3 is correct.**
- It is used in **groundwater assessment** through satellite gravimetry and surface indicators.
- Remote sensing helps identify **mineral deposits and alteration zones** using hyperspectral imaging.
- It supports **oil and gas exploration** by identifying geological structures such as anticlines and sedimentary basins.
- Remote sensing is used in **soil mapping**, including soil moisture, salinity, and erosion assessment.
- It aids in **coastal zone management**, including shoreline change detection and mangrove mapping.
- Remote sensing plays a key role in **disaster management**, including cyclones, landslides, forest fires, and earthquakes.
- It is used for **urban planning** by monitoring urban sprawl, infrastructure growth, and heat islands.
- Remote sensing supports **weather forecasting and climate studies** through continuous atmospheric monitoring.
- It helps in **biodiversity conservation** by identifying habitats and monitoring wildlife ecosystems.
- Remote sensing is used in **glacier monitoring** and assessment of snow cover and melt patterns.
- It assists in **marine resource management**, including fisheries potential zone mapping.
- Remote sensing enables **environmental impact assessment** and pollution monitoring.
- It supports **national security and border surveillance** through high-resolution imaging. **Hence statement 4 is correct.**

PYQ REFERENCE:

Q. In which of the following activities are Indian Remote Sensing (IRS) satellites used? [2015]

- Assessment of crop productivity
- Locating groundwater resources
- Mineral exploration
- Telecommunications
- Traffic studies

Select the correct answer using the code given below.

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

Source: <https://www.thehindu.com/sci-tech/science/what-remote-sensing-reveals-about-plants-forests-and-minerals-from-space/article70474634.ece/amp/>

3. Biomaterials

Q. Consider the following statements:

Statement-I: Biomaterials can reduce India's dependence on fossil-based imports.

Statement-II: Biomaterials are derived wholly or partly from biological sources, including agricultural residues.

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: What are biomaterials and how do they work?

Biomaterials:

- Biomaterials are materials derived wholly or partly from **biological sources** or **engineered using biological processes** to replace or interact with conventional materials. **Hence, Statement-II are correct and Statement-II is the correct explanation for Statement-I**

- Types of Biomaterials:**

- **Drop-in:** Chemically identical to petroleum-based materials; compatible with existing manufacturing systems (e.g., bio-PET).
- **Drop-out:** Chemically different; require new processing or disposal systems (e.g., PLA – polylactic acid).
- **Novel:** Have new properties not found in conventional materials (e.g., self-healing materials, bioactive implants).

- Applications:** Packaging, textiles, construction, healthcare.

● **Significance for India:**

- Reduces **dependence on fossil-based imports**. **Hence, Statement 1 is correct**
- Promotes **farmers' income** by using agricultural feedstocks and residues.
- Supports **climate action, circular economy, and plastic bans**.
- Enhances **export competitiveness** in low-carbon products.

PYQ REFERENCE: (2020)

Q. What is the use of biochar in farming?

1. Biochar can be used as a part of the growing medium in vertical farming.
2. When biochar is a part of the growing medium, it promotes the growth of nitrogen-fixing microorganisms.
3. When biochar is a part of the growing medium, it enables the growing medium to retain water for longer time.

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**

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/what-are-biomaterials-and-how-do-they-work-explained/article70477939.ece>

4. X-ray photoelectron spectroscopy (XPS)

Q. X-ray Photoelectron Spectroscopy (XPS) is primarily used to study which of the following properties of a material?

1. Surface elemental composition
2. Chemical bonding and oxidation states
3. Bulk mechanical strength
4. Electronic environment of atoms

Select the correct answer using the code given below:

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

Answer: (b) 1, 2 and 4 only

Explanation:

In NEWS: New way to study surfaces brings 'real world' pressure into the lab

X-ray Photoelectron Spectroscopy (XPS):

- XPS is an **analytical technique** used to study the **surface chemistry of materials**.
- It is based on the **photoelectric effect**, where X-rays eject electrons from a material's surface.
- XPS provides information about:
 - **Elemental composition**
 - **Chemical state**
 - **Electronic state** of elements. **Hence 1, 2 and 4 are correct.**
- It is a **surface-sensitive technique**, typically analysing only the **top 1–10 nanometres** of a material.

- XPS can detect **all elements except hydrogen and helium**.
- The technique requires **ultra-high vacuum conditions**.
- XPS is widely used in **materials science, nanotechnology, catalysis, semiconductors, corrosion studies, and biomaterials research**.

PYQ REFERENCE: (1995)

Q. The chemical used as a 'fixer' in photography is

- (a) Sodium sulphate
- (b) Sodium thiosulphate**
- (c) Ammonium persulphate
- (d) Borax

Source: <https://www.thehindu.com/sci-tech/science/pressure-gap-x-ray-photoelectron-spectroscopy-de-laval-nozzle/article70477084.ece#:~:text=One%20of%20the%20best%20tools,and%20how%20they're%20bonding.>

5. Light Water Reactor (LWR)

Q. Consider the following statements regarding India's Light Water Reactor (LWR) and nuclear programme:

1. Light Water Reactor (LWR) use ordinary water as both coolant and moderator and are fueled by enriched uranium.
2. The SHANTI Act, 2025, allows private companies to set up nuclear power plants and undertake import/export of nuclear fuel and technology.

Which of the statements given above 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: India flags the Indigenous Light Water Reactor (LWR) as nuclear priority. But why?

Light Water Reactor (LWR):

- LWRs are **nuclear reactors using ordinary water (H₂O) as coolant and moderator**, fueled by **enriched uranium**. **Hence statement 1 is correct.**

Global Significance:

- Account for **over 85% of civil nuclear reactor capacity worldwide**.
- Widely used by **USA, Russia, France**, and other countries due to **lower construction cost, simpler design, thermal efficiency**.

Advantages over Heavy Water Reactors (PHWRs):

- **Simpler design and engineering**, resembling conventional thermal power technology
- Lower construction cost due to **economies of scale**
- **Higher thermal efficiency**
- **Access to enriched uranium fuel is easier globally**

India's Indigenous LWR:

- **900 MWe LWR project** initiated in 2015, currently a **priority for fabrication**
- Indigenous LWR helps **leverage foreign imports**, integrate India into **global nuclear supply chains**, and enter **export market**

SHANTI Act, 2025

Full form: Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Act, 2025

Purpose:

- Opens India's **nuclear sector to private companies**
- Allows **import, export, transport, storage of nuclear fuel, technology, and equipment. Hence statement 2 is correct.**
- Aligns India's regulations with **global nuclear commerce norms**

India's Three-Stage Nuclear Programme

Stage 1: Pressurized Heavy Water Reactors (PHWRs)

- Uses **natural uranium fuel** and **heavy water (D₂O)** as coolant & moderator
- Produces **electricity** and **plutonium (Pu-239)** for next stage
- Supplemented by imported **LWRs**

Stage 2: Fast Breeder Reactors (FBRs)

- Uses **plutonium-based fuel**
- Converts **fertile thorium (Th-232) into fissile uranium-233 (U-233)**
- Enhances nuclear capacity via **breeding more fissile material**

Stage 3: Advanced Reactors (Th-U233 Cycle)

- Uses **U-233 produced from Stage 2**
- Advanced thermal reactors and fast breeder reactors (e.g., **AHWR**) for **long-term energy security**
- Future option: **Molten Salt Reactors**

PYQ REFERENCE: (2011)

Q. The function of heavy water in a nuclear reactor is to

- (a) **Slow down the speed of neutrons**
- (b) Increase the speed of neutrons
- (c) Cool down the reactor
- (d) Both (a) and (c)

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-india-light-water-reactor-nuclear-energy-upsc-exam-10484294/>

6. India's hydro pumped storage

Q. Consider the following about pumped-storage hydroelectricity (PSH):

1. Pumped-storage hydroelectricity (PSH) stores electricity in the form of gravitational potential energy by moving water between two reservoirs at different elevations.
2. India plans to develop 100 GW of hydro pumped storage capacity 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

Answer: (a) 1 only

Explanation:

In NEWS:

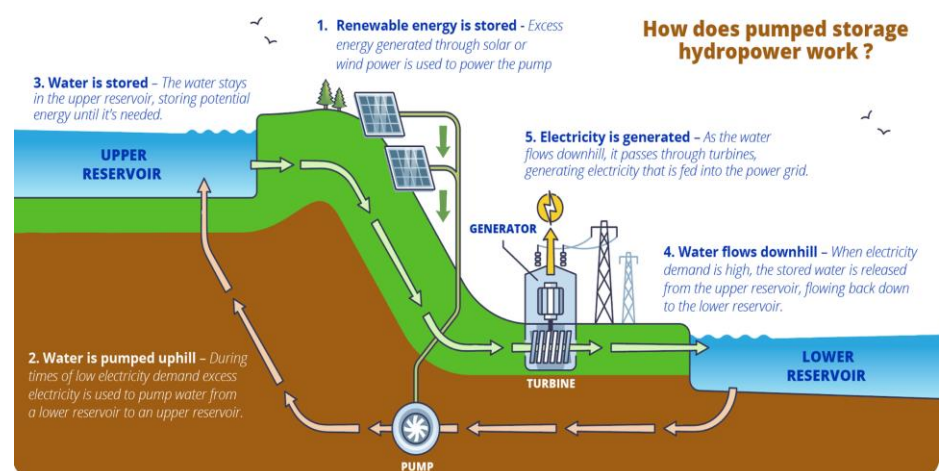
- India has charted a formal roadmap to develop **100 GW** of hydro pumped storage capacity by **2047** to help stabilize its rapidly growing renewable energy sector. **Hence statement 2 is incorrect.**
- This plan integrates long-duration energy storage as a core component of grid reliability and peak demand management.
- Over 120 potential pumped storage sites have been identified nationwide, with total potential exceeding ~180 GW, out of which 100 GW is targeted for development by 2047.
- About 22 GW is already under development, and 50–60 GW are shortlisted for rollout by 2032–37 in line with renewable expansion plans.
- Key states expected to lead early development include Andhra Pradesh, Maharashtra, Odisha, Gujarat, and Tamil Nadu, with projects that leverage existing reservoirs and off-river (closed-loop) systems to reduce social and environmental impacts.

Pumped hydro storage:

- Pumped-storage hydroelectricity (PSH) is a form of energy storage and grid management technology that works like a giant water-based battery.
- It stores electricity in the form of gravitational potential energy by moving water between two reservoirs at different elevations. **Hence statement 1 is correct.**
- It is the largest form of grid energy storage worldwide, accounting for the vast majority of installed storage capacity.

Mechanism:

- When electricity demand is low, surplus or cheap power (often from renewables like solar and wind) is used to pump water from a lower reservoir up to a higher one.
- When demand is high, water is released back down to the lower reservoir through turbines, generating electricity.
- The system uses reversible pump-turbines that can both pump water up and generate electricity when water flows down.



Benefits

- PSH balances supply and demand on the grid and stabilises it by storing excess power and releasing it when needed.
- It helps manage intermittent renewable energy, such as solar and wind, by capturing surplus generation.
- Though it consumes more energy to pump water up than it generates when released, it increases system value by providing electricity at peak demand times when prices are higher.

PYQ REFERENCE: (2024)

Q. Recently, the term “pumped-storage hydropower” is actually and appropriately discussed in the context of which one of the following?

- (a) Irrigation of terraced crop fields
- (b) Lift irrigation of cereal crops
- (c) Long-duration energy storage**
- (d) Rainwater harvesting system

Source: <https://www.downtoearth.org.in/energy/india-charts-roadmap-to-tap-100-gw-of-hydro-pumped-storage-to-stabilise-renewables-surge>

7. Mephedrone

Q. ‘Mephedrone’, recently seen in the news in the context of “Operation Sahyadri Checkmate” is a

- (a) Synthetic stimulant drug
- (b) Plant-based hallucinogen
- (c) Synthetic nano fertiliser
- (d) Biological toxin produced by bacteria

Answer: (a) Synthetic stimulant drug

Explanation:

In NEWS: DRI busts mobile mephedrone lab in Sahyadri Ranges under “Operation Sahyadri Checkmate”; seizes nearly 22 kg mephedrone in different forms

Mephedrone:

- Mephedrone (chemical name 4-methylmethcathinone, also called 4-MMC) is a **synthetic stimulant drug** in the amphetamine-cathinone class. **Hence option (a) is correct.**
- It’s often sold illegally in powder or tablet form and used recreationally for its psychoactive effects.
- Mephedrone is illegal in many countries:
 - In the UK it is classified as a Class B drug.
 - In the US, it is a Schedule I controlled substance.
 - Most European and many other countries have banned it under narcotics laws.

Effects and Risks

- Short-term effects can include increased heart rate and blood pressure, euphoria, alertness, and heightened mood.
- Negative effects may include anxiety, paranoia, dilated pupils, nausea, headaches, teeth grinding, and erratic behaviour.
- More serious reactions reported include hallucinations, depression, breathing problems, and cardiovascular strain.
- Snorting can damage nasal tissue, and injecting carries infection risks.

Status of Mephedrone in India:

- Mephedrone (also called MD or “meow meow”) is **illegal in India under the Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985.**
- It is classified as a controlled psychotropic substance, and all activities involving it are prohibited unless licensed.
- **Under the NDPS Act, the following are offences without a licence:**
 - Manufacture

- Possession
- Transport
- Sale/Distribution
- Import/Export
- Any involvement in these attracts criminal prosecution.
- Penalties under the NDPS Act are stringent and depend on quantity:
 - Small quantity: Can include imprisonment (up to 1 year) and/or fine (up to ₹10,000).
 - Commercial quantity and trafficking: Long prison terms (several years) and high fines are imposed.
- Courts in India have handed down multi-year prison sentences (e.g., up to 15 years) for trafficking in commercial quantities of mephedrone.

PYQ REFERENCE: (2008)

Q. What is Bisphenol A (BPA)?

- (a) A medical test for detecting cancer
- (b) A test for testing the use of drugs to improve performance by athletes
- (c) A chemical used for the development of food packaging materials**
- (d) A special type of alloy steel

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2218560®=3&lang=1>

8. Antimicrobial Resistance (AMR)

Q. Which one of the following best describes Antimicrobial Resistance?

- (a) Failure of vaccines to prevent infectious diseases
- (b) Reduced effectiveness of antimicrobial drugs due to microbial adaptation
- (c) Inability of the human body to respond to medicines
- (d) Spread of infectious diseases through contaminated water

Answer: (b) Reduced effectiveness of antimicrobial drugs due to microbial adaptation

Explanation:

In NEWS: Fine-tune this signal to sharpen India’s AMR battle

Antimicrobial Resistance (AMR):

- **Antimicrobial Resistance (AMR)** occurs when microorganisms such as bacteria, viruses, fungi, and parasites develop the ability to survive exposure to antimicrobial medicines.
- **Irrational, excessive, and incomplete use of antibiotics** is the single largest driver of AMR globally and in India.
- AMR leads to **reduced effectiveness of standard treatments**, prolonged illness, higher mortality, and increased healthcare costs. **Hence option (b) is correct.**
- **Self-medication and over-the-counter sale of antibiotics** significantly contribute to the spread of AMR in India.
- **AMR threatens the success of modern medical procedures** such as surgeries, chemotherapy, and organ transplantation.
- **India is among the largest consumers of antibiotics in the world**, increasing its vulnerability to AMR.
- **Drug-resistant tuberculosis** is a major component of India’s AMR burden.

- **The One Health approach** recognises that AMR is influenced by the interconnectedness of human health, animal health, and environmental health.
- Use of antibiotics as **growth promoters in livestock** contributes to the emergence of antimicrobial resistance.
- **Environmental contamination** through pharmaceutical waste and untreated sewage plays a role in the spread of AMR.

Institutional & Policy Statements (India)

- **The National AMR Surveillance Network (NARS-Net)** was established in 2013 under the National Centre for Disease Control.
- NARS-Net provides AMR surveillance data to the **WHO's Global Antimicrobial Resistance and Use Surveillance System (GLASS)**.
- AMR surveillance in India is currently **concentrated in urban and tertiary healthcare centres**.
- **The National Action Plan on AMR** aims to strengthen surveillance, promote rational antibiotic use, and enhance public awareness.
- India has **banned the use of colistin as a growth promoter in animals** to curb AMR.

Global Framework Statements

- The **WHO Global Action Plan on AMR (2015)** emphasises awareness, surveillance, infection prevention, rational antimicrobial use, and sustainable investment.
- **AMR directly undermines the achievement of Sustainable Development Goal 3** on health and well-being.

PYQ REFERENCE: (2019)

Q. Which of the following are the reasons for the occurrence of multi-drug resistance in microbial pathogens in India?

1. Genetic predisposition of some people
2. Taking incorrect doses of antibiotics to cure diseases
3. Using antibiotics in livestock farming
4. Multiple chronic diseases in some people

Select the correct answer using the code given below.

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

Source: <https://www.thehindu.com/opinion/op-ed/fine-tune-this-signal-to-sharpen-indias-amr-battle/article70483552.ece>

9. Nipah Virus

Q. Consider the following statements:

1. Direct contact with infected bats or pigs
2. Consumption of contaminated fruits or raw date-palm sap
3. Human-to-human transmission via respiratory droplets and bodily fluids

How many of the above are possible transmission of Nipah Virus?

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

Answer: (c) All three

Explanation:

In NEWS: Centre steps in as two Nipah cases detected in Bengal

Nipah Virus:

- Nipah virus (NiV) is a **zoonotic virus** belonging to the **Paramyxoviridae family**, genus **Henipavirus**.
- It was first identified in **1998-99 in Malaysia** during an outbreak among pig farmers.
- The virus is classified as a **Biosafety Level-4 (BSL-4) pathogen**.

Natural Reservoir and Transmission

- **Fruit bats (Pteropus species)** are the natural reservoir.
- Transmission occurs through:
 - Direct contact with infected bats or pigs
 - Consumption of **contaminated fruits or raw date-palm sap**
 - **Human-to-human transmission** via respiratory droplets and bodily fluids. **Hence all are correct.**

Symptoms and Disease Profile

- Incubation period: **5-14 days** (may extend up to 45 days).
- Initial symptoms:
 - Fever, headache, muscle pain, vomiting
- Severe manifestations:
 - **Encephalitis**, seizures, coma
- Case Fatality Rate (CFR):
 - Ranges between **40% and 75%**, varying by outbreak and healthcare response.

Nipah Virus in India

- First outbreak reported in **West Bengal (2001)**.
- Recurrent outbreaks recorded in **Kerala (2018, 2021, 2023)**.
- Transmission in India often linked to:
 - Bat-contaminated fruits
 - Close contact in healthcare and family settings

Diagnosis and Treatment

- Diagnosis through:
 - RT-PCR
 - ELISA tests
- **No specific antiviral treatment or licensed vaccine** currently available.
- Management is **supportive care**, including intensive neurological and respiratory support.

Prevention and Control Measures

- Surveillance of bat populations and human cases
- Avoidance of partially eaten fruits and raw palm sap
- Strict **infection prevention and control (IPC)** practices in hospitals
- Isolation, contact tracing and quarantine during outbreaks

Global and National Significance

- Listed by **WHO as a priority disease** under the R&D Blueprint.
- Highlights the importance of:
 - **One Health approach** (human-animal-environment interface)
 - Strengthening public health surveillance and outbreak preparedness.

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.thehindu.com/news/national/west-bengal/centre-steps-in-as-two-nipah-cases-detected-in-bengal/article70502064.ece>

10. Huntington's Disease

Q. Which of the following statements are correct regarding the management of Huntington's Disease?

1. It is a fatal inherited neurodegenerative disorder that progressively destroys brain cells.
2. There is no cure and the disorder is progressive and irreversible, leading to severe disability and death

Select the answer using the code given below:

- (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: Caregivers shoulder Huntington's Disease weight with little aid

Huntington's Disease:

- Huntington's disease (HD), also known as **Huntington's chorea**, is a **fatal inherited neurodegenerative disorder** that progressively destroys brain cells, affecting movement, cognition, and behavior.

Hence statement 1 is correct.

Causes and Genetics

- HD is caused by a **genetic mutation** in the *HTT* gene on **chromosome 4**.

- The *HTT* gene mutation involves an **expanded CAG trinucleotide repeat**, leading to production of an abnormal protein (huntingtin) that gradually damages neurons.

- The inheritance pattern is **autosomal dominant** — a child of an affected parent has a **50% chance** of inheriting the faulty gene.

Onset and Progression

- Symptoms usually appear in **mid-adulthood (30–50 years)** but can occur earlier in **juvenile HD**.

- The disorder is **progressive and irreversible**, leading to severe disability and ultimately death within **15–20 years** of symptom onset.

Hence statement 2 is correct.

Symptoms

HD typically presents as a triad of:

1. **Motor symptoms** – involuntary, dance-like movements known as *chorea*, poor coordination, gait disturbances.
2. **Cognitive decline** – memory loss, impaired judgment, difficulty in planning.
3. **Psychiatric/behavioral changes** – mood swings, depression, irritability, apathy.

As the disease advances, patients may develop marked disability, speech and swallowing difficulties, and require full-time care.

Management and Treatment

- There is **no cure** for HD; treatment is **supportive** and focuses on managing symptoms.
- Medications like **tetrabenazine** help control involuntary movements.
- Psychiatric symptoms may be treated with antidepressants, mood stabilizers, and therapy.
- Experimental gene therapies are under clinical trials and show promise in slowing disease progression.

Complications and Prognosis

- HD is **invariably fatal**; common causes of death include infections (e.g., pneumonia), falls, and complications of immobility.
- Life expectancy after onset is generally **15–20 years**.

PYQ REFERENCE:

Q. According to the World Health Organisation (WHO), the disease which causes the death of the largest number of people today is [1996]

- (a) AIDS
(b) Tuberculosis
(c) Malaria
(d) Ebola

Source: <https://www.thehindu.com/sci-tech/health/caregivers-shoulder-huntingtons-disease-weight-with-little-aid/article70460590.ece/amp/>

11. Mars Return mission

Q. "The Mars Sample Return (MSR) mission", recently seen in the news, aims to bring rock and soil samples from Mars back to Earth. It is a joint planned mission of which of the following agencies?

- (a) NASA and ESA
(b) NASA and Roscosmos
(c) ESA and CNSA
(d) NASA and JAXA

Answer: (a) NASA and ESA

Explanation:

In NEWS: ESA-NASA Mars Sample Return mission called off

Mars Return (Mars Sample Return) Mission:

- The **Mars Sample Return (MSR) mission** was a joint planned mission of **NASA and the European Space Agency (ESA)** to bring **rock and soil samples from Mars back to Earth**. **Hence option (a) is correct.**

- Samples intended for return were collected and cached on Mars by **NASA's Perseverance rover** during its exploration of the Jezero Crater.

- The mission architecture included a **Sample Retrieval Lander**, a **Mars Ascent Vehicle (MAV)** to launch samples from the Martian surface, and an **Earth Return Orbiter** to transport them to Earth.
- The Mars Sample Return mission aimed to achieve the **first-ever launch of a rocket from the surface of another planet**.
- The mission faced **significant technical complexity and cost escalation**, with projected costs running into **several billion dollars**.
- In **January 2026**, the **NASA-ESA joint Mars Sample Return mission was called off**, primarily due to **budgetary constraints and funding uncertainties**.
- ESA stated that it could **not pursue the mission independently** under the original design after reduced financial commitment from NASA.
- The cancellation does **not affect the Perseverance rover's operations**, and the collected samples **remain safely stored on Mars**.
- Returning Martian samples to Earth is considered **scientifically critical** for understanding **Mars's geology, climate history, and potential past life**, as such analyses cannot be fully conducted on Mars.
- Future Mars sample return efforts may still be pursued through **revised mission architectures or new international partnerships**.

PYQ REFERENCE: (2016)

Q. Consider the following statements:

The Mangalyaan launched by ISRO

1. is also called the Mars Orbiter Mission
2. made India the second country to have a spacecraft orbit the Mars after USA
3. made India the only country to be successful in making its spacecraft orbit the Mars in its very first attempt

Which of the statement(s) 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://indianexpress.com/article/technology/science/esa-nasa-mars-sample-return-mission-called-off-10462404/#google_vignette

12. PSLV-C62/EOS-N1 mission

Q. "PSLV-C62 / EOS-N1 mission", recently seen in news is associated with:

- (a) Launch of an interplanetary probe
(b) Earth observation satellite
(c) Launch of a communication satellite
(d) Human spaceflight mission

Answer: (b) Earth observation satellite

Explanation:

In NEWS: Countdown for launch of PSLV-C62/EOS-N1 mission begins

PSLV-C62 / EOS-N1 Mission:

- **PSLV-C62 / EOS-N1** is an ISRO mission using the **Polar Satellite Launch Vehicle (PSLV-DL)** to launch the **EOS-N1 Earth observation**

satellite along with multiple co-passenger satellites. **Hence option (b) is correct.**

- It is the **first space mission of 2026 for ISRO** and the **64th flight of the PSLV** launch vehicle.
- The mission is the **9th dedicated commercial mission** executed by **NewSpace India Limited (NSIL)**, ISRO's commercial arm.
- The primary satellite, **EOS-N1** (also called *Anvesha*), is an **Earth observation satellite** designed for **agriculture, resource mapping, environmental monitoring, disaster management, and strategic surveillance**.
- **15 co-passenger satellites** from both **domestic and international customers** were also carried on the mission.
- The mission included a **technology demonstration** involving the **Kestrel Initial Technology Demonstrator (KID)** — a prototype re-entry vehicle intended to be deployed on a **re-entry trajectory** after satellite deployment.
- The PSLV-C62 was expected to inject EOS-N1 and the co-passenger satellites into a **Sun-synchronous orbit**, then **restart its fourth stage (PS4)** to de-boost and support separation of the KID capsule for controlled re-entry.
- The launch took place from the **First Launch Pad at Satish Dhawan Space Centre, Sriharikota** at **~10:18 IST on January 12, 2026**.
- Soon after lift-off, an **anomaly occurred near the end of the third stage of the PSLV**, leading to a **deviation in the flight path** and prompting ISRO to initiate **detailed analysis of the mission performance**.
- The mission underscores ISRO's role in **earth observation, commercial launch services, private sector and international collaboration**, as well as **technology demonstration for future space systems**.

PYQ REFERENCE: (2018)

Q. With reference to India's satellite launch vehicles, consider the following statements:

1. PSLVs launch the satellites useful for Earth resources monitoring whereas GSLVs are designed mainly to launch communication satellites.
2. Satellites launched by PSLV appear to remain permanently fixed in the same position in the sky, as viewed from a particular location on Earth.
3. GSLV Mk III is a four-staged launch vehicle with the first and third stages using solid rocket motors; and the second and fourth stages using liquid rocket engines.

Which of the statements given above is/are correct?

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

Source: <https://www.thehindu.com/sci-tech/science/countdown-for-launch-of-pslv-c62eos-n1-mission-begins/article70497456.ece>
https://www.isro.gov.in/ISRO_HINDI/Mission_PSLV_C62.html

13. Artemis II mission

Q. Consider the following statements with respect to Artemis II mission:

- I. It is a planned crewed lunar mission of NASA.
- II. The spacecraft will land on the Moon's south pole.
- III. It will mark the first time humans travel beyond low Earth orbit since the Apollo 17 mission in 1972.

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: (c) I and III only

Explanation:

In NEWS: Nasa's giant new moon rocket headed to the launch pad Saturday in preparation

Artemis II:

- Artemis II is a planned crewed lunar mission under NASA's Artemis program. **Hence statement I is correct.**
- It will be the **first mission to carry astronauts aboard the Orion spacecraft.**
- The mission will use NASA's Space Launch System (SLS) Block-1 rocket.
- Artemis II will carry a crew of four astronauts, including three from NASA and one from the Canadian Space Agency.
- The spacecraft will perform a lunar flyby and **will not land on the Moon. Hence statement II is incorrect.**
- The mission will follow a free-return trajectory around the Moon and return safely to Earth.
- The planned mission duration is about **ten days.**
- Artemis II will test life-support systems, navigation, communication, and crew operations in deep space.
- It will mark the first time humans travel beyond low Earth orbit since the Apollo 17 mission in 1972. **Hence statement III is correct.**
- The mission is a precursor to future Artemis missions that aim to land humans on the Moon.

PYQ REFERENCE: (2008)

Q. What is the purpose of the US Space Agency's Themis Mission, which was recently in the news?

- (a) To study the possibility of life on Mars
- (b) To study the satellites of Saturn
- (c) To study the colourful of display of high latitude skies**
- (d) To build a space laboratory to study the stellar explosions

Source: <https://timesofindia.indiatimes.com/science/artemis-ii-mission-nasas-new-moon-rocket-heads-to-launch-pad-ahead-of-astronaut-launch-as-early-as-february/articleshow/126617247.cms>

14. Samudra Pratap

Q. Consider the following statements regarding ICGS Samudra Pratap:

1. ICGS Samudra Pratap is India's first indigenously designed Pollution Control Vessel (PCV).
2. It is the largest ship in the Indian Coast Guard (ICG) fleet.

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

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

Answer: (d) Neither 1 nor 2

Explanation:

In NEWS: Raksha Mantri commissions Indian Coast Guard Ship Samudra Pratap, India's first indigenously designed Pollution Control Vessel built by GSL

Samudra Pratap:

- ICGS Samudra Pratap is India's **first indigenously designed Pollution Control Vessel (PCV). Hence statement 1 is correct**
- Built by Goa Shipyard Limited (GSL), commissioned on **January 5, 2026.**
- It is the **largest ship in the Indian Coast Guard (ICG) fleet to date. Hence statement 1 is correct**
- The ship has **over 60% indigenous content.**
- **Primary Role:** Pollution control in maritime zones.
- **Other Capabilities:** Coastal patrol, maritime safety, fire-fighting, environmental protection, and extended surveillance.
- **Aviation Support:** Equipped with a **helicopter hangar** and aviation facilities for enhanced reach.
- **Pollution Control Equipment:** Side-sweeping arms, floating booms, high-capacity skimmers, portable barges, and onboard pollution control laboratory.
- **Fire-Fighting Capability: External Fire-Fighting System (Fi-Fi Class 1).**
- **Automation & Navigation:** Features **Dynamic Positioning, Integrated Bridge System, Integrated Platform Management System, and Automated Power Management System.**
- **Armament:** One 30 mm CRN-91 gun and two 12.7 mm Stabilised Remote-Controlled Guns, with modern fire-control systems.
- **Significance:** Strengthens India's capability to **respond to maritime pollution, ensure coastal security, and conduct multi-mission operations.**

PYQ REFERENCE:

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.pib.gov.in/PressReleasePage.aspx?PRID=2211397®=3&lang=1>

15. Joint Exercise in 2025

Q. Consider the following pairs:

Joint Exercise	Participating Countries
1. Ekuverin-XIII	India – Maldives
2. Cyclone-III	India – Egypt
3. Dharma Guardian-VI	India – Japan
4. Nomadic Elephant	India – Mongolia

How many of the pairs given above are correctly matched?

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

Answer: (d) All four

Explanation:

In NEWS: MINISTRY OF DEFENCE; YEAR END REVIEW - 2025

Major Joint Exercises with FFCs from Jan-Nov 2025 :-

Joint Exercise	Participation
1. Ekuverin-XIII (Tri-Service)	India-Maldives
2. Cyclone-III (Single Service)	India-Egypt
3. Dharma Guardian-VI(Single Service)	India-Japan
4. Khanjar-XII	India-Kyrgyzstan
5. Tiger Triumph (Tri-Service Exercise)	India-USA
6. DUSTLIK	India-Uzbekistan
7. IMBAX	India-Myanmar
8. Nomadic Elephant	India-Mongolia
9. Ex Shakti	India-France
10. Ex Bold Kurukshetra	India-Singapore
11. Ex Bright Star	India-Egypt
12. Ex Yudh Abhyas	India-USA
13. Ex Maitree	India-Thailand
14. Ex Zapad	India-Russia
15. Ex INDRA, 13th Edition	India-Russia
16. Ex AUSTRALIND	India-Australia
17. Ex Mitra Shakti	India-Sri Lanka
18. Ex VINBAX	India-Vietnam
19. Ex Ajeya Warrior	India-UK

Hence all the pairs are correct.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210154®=3&lang=1>

16. 'Justice Mission - 2025'

Q. "Justice Mission 2025", a military exercise conducted by which among the following countries?

- (a) United States
- (b) China
- (c) Taiwan
- (d) Japan

Answer: (b) China

Explanation:

In NEWS: What is behind China's latest military drills around Taiwan?

Justice Mission-2025:

- China conducted the "Justice Mission - 2025" military drill around Taiwan on 29 - 30 December 2025. Hence option (c) is correct.
- The drill aimed to safeguard China's sovereignty, deter Taiwanese separatists, and counter foreign interference.
- Focus areas included sea and air combat readiness, blockade of key ports, and three-dimensional deterrence using land, sea, and air forces.
 - On Day 1, the PLA conducted 130 air sorties, of which 90 crossed the Taiwan Strait centreline.
 - On Day 2, 10 long-range rockets landed in Taiwan's contiguous zone, the closest ever to the island.

Source: <https://www.thehindu.com/news/international/what-is-behind-chinas-latest-military-drills-around-taiwan-explained/article70535016.ece>

17. TROPEX 25

Q. TROPEX-25, recently seen in the news, is:

- (a) A multinational air exercise hosted by Indian Airforce
- (b) A biennial theatre-level operational readiness exercise of the Indian Navy
- (c) An annual tri-service exercise conducted by the Indian Armed Forces
- (d) A bilateral maritime exercise between India and the United States

Answer: (b) A biennial theatre-level operational readiness exercise of the Indian Navy

Explanation:

In NEWS: MINISTRY OF DEFENCE; YEAR END REVIEW - 2025

TROPEX-25:

- TROPEX-25 stands for Theatre Level Operational Readiness Exercise of the Indian Navy.
- It is a biennial capstone exercise conducted by the Indian Navy. Hence option (b) is correct.
- TROPEX-25 was conducted from January to March 2025.
- The exercise was carried out in multiple phases, both in harbour and at sea.
- It integrated surface, sub-surface and air combat operations.
- Cyber and electronic warfare operations formed an important component of the exercise.

- **Live weapon firing drills** were conducted during the **Joint Work-up Phase**.
- **Amphibious operations** involving landing forces were practiced during the exercise.
- Apart from the Indian Navy, **Indian Army troops, Indian Air Force aircraft and Indian Coast Guard ships** participated in TROPEX-25.
- The exercise aimed at validating the **Indian Navy's core war-fighting skills** in a **contested maritime environment**.
- TROPEX-25 focused on achieving a **synchronised and integrated response** to protect India's maritime security interests.
- The exercise also assessed the **operational, material and logistics preparedness** of the Indian Navy.
- This preparedness assessment was undertaken as part of **Exercise Taiyaar**.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210154®=3&lang=1>

ENVIRONMENT AND AGRICULTURE

1. Aravalli Green Wall initiative

Q. The Aravalli Green Wall Initiative, recently seen in the news, aims to:

- Create a continuous green belt along the Indo-Pak border
- Increase mangrove cover along India's western coast
- Develop urban forests in National Capital Region
- Restore degraded land and prevent desertification in the Aravalli range

Answer: (d) Restore degraded land and prevent desertification in the Aravalli range

Explanation:

In NEWS:

Aravalli Landscape Restoration (Green Wall Initiative)

- The Aravalli Green Wall initiative proposes restoration of **6.31 million hectares**, with priority intervention areas in **Rajasthan, Gujarat, Haryana and Delhi**.
- A phase-wise restoration plan (2025-2034) focuses on **forest restoration, grassland rejuvenation, and mine reclamation** through convergence with **CAMPA, MGNREGS, Green India Mission**, and other programmes. **Hence option (d) is correct.**
- In 2025, about 36,025 Ha area have been restored.
- 435 nurseries falling under the Aravalli landscapes across four States, with a combined approximate production capacity of 393.24 lakh seedlings has been established.
- A Detailed Action Plan for Aravalli Landscape Restoration, a major initiative to restore the Aravalli Hill Range was unveiled on 21 May 2025. The Action Plan outlines a science-based, community-led, and policy-supported roadmap to restore the ecological integrity of the Aravallis.

PYQ REFERENCE: (2015)

Q. Which of the following statements regarding 'Green Climate Fund' is/are correct?

- It is intended to assist developing countries in adaptation and mitigation practices to counter climate change.
- It is founded under the aegis of UNEP, OECD, Asian Development Bank and World Bank.

Select the correct answer using the code given below.

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210100®=3&lang=1>

2. Madhav Gadgil

Q. Consider the following statements:

- He is a renowned Indian ecologist associated with the Indian Institute of Science, Bengaluru.
- He chaired the Western Ghats Ecology Expert Panel, which recommended declaring large parts of the Western Ghats as Ecologically Sensitive Areas.
- He played a key role in the establishment of India's first Biosphere Reserve.

Who is the person described above?

- M.S. Swaminathan
- Salim Ali
- Madhav Gadgil
- Anil Agarwal

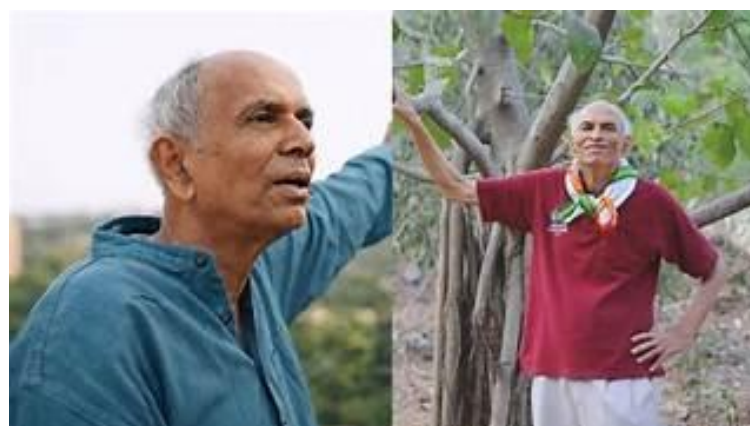
Answer: (c) Madhav Gadgil

Explanation:

In NEWS: Kerala's reluctant prophet: Why Madhav Gadgil could never be ignored in the land of landslides

Madhav Gadgil - Indian Ecologist & Environmental Scientist:

- **Madhav Dhananjaya Gadgil** is a distinguished **Indian ecologist, academic, author and conservationist** renowned for his pioneering contributions to ecological research and environmental policy in India.
- He is widely respected for integrating **scientific research with community-centred conservation** and shaping national environmental thinking.



Early Life & Education

- Born on **24 May 1942** in Pune, Maharashtra.
- He completed his **B.Sc. (Biology)** from Pune, **M.Sc. (Zoology)** from Mumbai, and **Ph.D.** from Harvard University.

Academic Career & Contributions

- Joined the **Indian Institute of Science (IISc), Bengaluru** in 1973.
- Founded the **Centre for Ecological Sciences (CES)** at IISc, building it into a leading research centre for ecology and conservation.
- His research spans ecology, conservation biology, human ecology and ecological history, and includes over **250 scientific papers** and several influential books.
- His work emphasised **quantitative ecology** and **ecosystem understanding** with humans as integral to ecological systems.

Landmark Achievements

Biosphere Reserve

- Played a key role in establishing the **Nilgiri Biosphere Reserve (1986)** — India's first biosphere reserve

Gadgil Commission (WGEEP)

- Chaired the **Western Ghats Ecology Expert Panel (WGEEP)** in 2010.
- The panel's **Gadgil Report** recommended classifying around **64% of the Western Ghats as Ecologically Sensitive Areas (ESAs)** to protect the globally important biodiversity hotspot.

Policy Influence

- Contributed to the **Biological Diversity Act, 2002** and development of **People's Biodiversity Registers**.
- Served on high-level bodies such as the **Scientific Advisory Council to the Prime Minister of India** and national environmental committees.

Awards & Recognition

Madhav Gadgil's work has been recognised with numerous honours:

- **Padma Shri (1981)** and **Padma Bhushan (2006)** by the Government of India.
- **Shanti Swarup Bhatnagar Prize for Science and Technology (1986)**.
- **Volvo Environment Prize** and **Tyler Prize for Environmental Achievement**.
- **Champions of the Earth Lifetime Achievement Award (2024)** — the **United Nations' highest environmental honour** — for his lifetime contribution to environmental leadership and community-inclusive conservation.

Philosophy & Legacy

Gadgil is known for:

- Championing **community-based conservation** rather than exclusionary models.
- Advocating that **local communities and traditional ecological knowledge** are vital to sustainable ecosystem management.
- Emphasising that conservation and social equity must go hand in hand.
- He inspired generations of ecologists and environmental policymakers, and his work remains influential in debates on **environment, development and sustainability** in India.

Hence option (c) is correct.

Source: <https://www.downtoearth.org.in/environment/keralas-reluctant-prophet-why-madhav-gadgil-could-never-be-ignored-in-the-land-of-landslides>

3. Per- and polyfluoroalkyl substances (PFAS)

Q. Consider the following statements:

Statement-I: Per- and polyfluoroalkyl substances (PFAS) are referred to as “forever chemicals.”

Statement-II: The carbon–fluorine bonds in PFAS molecules are extremely strong, making them highly resistant to environmental degradation.

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

- Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- Both Statement-I and Statement-II are correct, and Statement-II is not the correct explanation for Statement-I
- Statement-I is correct but Statement-II is incorrect
- 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: Rice University Breakthrough Promises Faster PFAS Pollution Cleanup

Per- and polyfluoroalkyl substances (PFAS):

- **PFAS** are “forever chemicals” with strong carbon–fluorine bonds, making them extremely persistent in the environment. **Hence, Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.**
- They are used in products for **water-, stain-, and heat-resistance** and accumulate in soil and water over decades.
- Exposure to PFAS is linked to **cancer, kidney and liver disease, and immune disorders**.
- Existing technologies like **activated carbon or reverse osmosis** capture but do not destroy PFAS, leaving disposal as a challenge.
- Scientists at **Rice University** developed a **layered double hydroxide (LDH) material** made from copper and aluminium to absorb PFAS.
- The LDH material is **positively charged**, enabling rapid attraction and absorption of negatively charged PFAS molecules.
- This new material can absorb certain PFAS **up to 100 times faster** than current filtration methods.
- The LDH approach allows **non-thermal destruction** of PFAS at relatively lower temperatures (400–500 °C), producing stable waste suitable for landfill.
- **Scaling for industrial use** and regulatory approvals remain key challenges for widespread deployment.

PYQ REFERENCE: (2024)

Q. With reference to perfluoroalkyl and Polyfluoroalkyl substances (PFAS) that are used in making many consumer products, consider the following statements :

- PFAS are found to be widespread in drinking water, food and food packaging material.
- PFAS are not easily degraded in the environment.
- Persistent exposure to PFAS can lead to bioaccumulation in animal bodies.

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.gktoday.in/rice-university-breakthrough-promises-faster-pfas-pollution-cleanup/>

4. National Board for Wild Life

Q. Consider the following statements with respect to the National Board for Wild Life:

- I. It is India's apex advisory body for wildlife conservation in India.
- II. It is chaired by the Minister for Environment, Forest & Climate Change.

Which of the statements given above are correct?

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

Answer: (a) I only

Explanation:

In NEWS: Union Environment Minister chairs 88th Meeting of the Standing Committee of the National Board for Wild Life, in New Delhi

The National Board for Wildlife

- The National Board for Wildlife (NBWL) is **India's apex advisory body for wildlife conservation**, established under the Wildlife (Protection) Act, 1972. **Hence statement I is correct.**
- It is **chaired by the Prime Minister**, and comprises various government officials, experts, and NGOs to guide policy, approve projects in protected areas, and promote wildlife protection. **Hence statement II is incorrect.**
- It replaced the Indian Board for Wildlife (IBWL) in 2003 and has a Standing Committee for day-to-day decisions, focusing on policy, project clearances, and conservation strategies for India's forests and wildlife.
- **Standing Committee:** A smaller group (including the Vice-Chairperson and Member Secretary) that meets more frequently (quarterly) to deliberate and grant/reject approvals.

Composition

- **Chairperson:** Prime Minister of India.
- **Vice-Chairperson:** Minister for Environment, Forest & Climate Change.
- **Members:** Includes Members of Parliament, Planning Commission representatives, and nominated non-governmental experts (conservationists, ecologists).

Key Functions

- **Policy & Strategy:** Develops policies for wildlife conservation, anti-poaching, and illegal trade.

- **Project Clearances:** Approves or rejects projects in or near National Parks, Tiger Reserves, and Sanctuaries, ensuring minimal impact.
- **Protected Area Management:** Advises on setting up and managing protected areas.
- **Habitat & Species Conservation:** Promotes development and conservation of wildlife and forests.

PYQ REFERENCE: (2014)

Q. Consider the following statements:

1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
2. National Tiger Conservation Authority is a statutory body.
3. National Ganga River Basin Authority is chaired by the Prime Minister.

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.pib.gov.in/PressReleasePage.aspx?PRID=2216052®=3&lang=1>

5. National Board for Wildlife

Q. Consider the following statements about the National Board for Wildlife (NBWL):

1. NBWL is a statutory body constituted in 2003 under the Wildlife (Protection) Act, 1972.
2. The Prime Minister of India is the Chairperson of the National Board for Wildlife.
3. The Standing Committee of NBWL is chaired by the Minister of Environment, Forest & Climate Change.
4. The NBWL has the power to advise both the Central and State Governments on wildlife protection and controlling poaching or illegal trade

Which of the statements given above are correct?

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

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

Explanation:

In NEWS: How did the National Board for Wildlife approve the Kaziranga elevated corridors and highway expansion?

National Board for Wildlife:

- **Statutory Status:** NBWL is a **statutory body** established in **2003** after the **2002 amendment** of the **Wildlife (Protection) Act, 1972**. **Hence statement 1 is correct.**
- **Genesis:**
 - In **1952**, the **Indian Board for Wildlife (IBWL)** was constituted as an advisory body.

- **First Chairman of IBWL:** Sri Jayachamaraja Wadiyar, Maharaja of Mysore.
- IBWL contributions include:
 - Drafting the **Wildlife (Protection) Act, 1972**
 - Establishment of **Gir National Park** for Asiatic lions
 - Declaring the **tiger as India's national animal**
- **Composition of NBWL:**
- **Chairperson:** Prime Minister of India. **Hence statement 2 is correct.**
- **Vice-Chairperson:** Union Minister in charge of **Ministry of Environment, Forest & Climate Change.**
- **Member-Secretary:** Additional Director General of Forests (WL) & Director, Wildlife Preservation
- **Five members** represent **non-governmental organisations** (nominated by Central Government)
- **Ten members** nominated from **eminent conservationists, ecologists, environmentalists**
- **Standing Committee:**
- NBWL has a **Standing Committee** to exercise powers delegated by the Board.
- **Chairperson of Standing Committee:** Minister of Environment, Forest & Climate Change. **Hence statement 3 is correct.**
- **Functions of NBWL:**
- Promote **conservation and development** of wildlife and forests
- Frame **policies** and advise **Central and State Governments** on wildlife protection and controlling **poaching/illegal trade.** **Hence statement 4 is correct.**
- Recommend **setting up and management** of **national parks, sanctuaries, and protected areas**
- Restrict or regulate **activities in protected areas**
- Conduct or supervise **impact assessment** of projects affecting wildlife or habitats

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.downtoearth.org.in/wildlife-biodiversity/how-did-the-national-board-for-wildlife-approve-the-kaziranga-elevated-corridors-and-highway-expansion>

6. The Central Ground Water Board (CGWB)

Q. The Central Ground Water Board (CGWB) functions under which of the following departments?

- (a) Department of Drinking Water and Sanitation
- (b) Department of Water Resources, River Development and Ganga Rejuvenation**
- (c) Department of Environment, Forest and Climate Change
- (d) Department of Rural Development

Answer: (b) Department of Water Resources, River Development and Ganga Rejuvenation

Explanation:

In NEWS: CGWB flags major contamination of groundwater in Andhra Pradesh

Central Ground Water Board (CGWB):

- Central Ground Water Board (CGWB) is a scientific department under the **Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.** **Hence option (b) is correct.**
- It is a multidisciplinary Scientific Organization with a mandate to "Develop and disseminate technologies for Scientific and Sustainable development and management of India's Ground Water Resources, including monitoring exploration, assessment and augmentation."
- The Central Ground Water Board was **formed in 1970** by renaming erstwhile Exploratory Tube well Organization. Subsequently, the Ground Water Division of the Geological Survey of India got merged with it in 1972.
- The Board was placed under various ministries in the past and since 1982, it is an organization under the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.
- Central Ground Water Board is also discharging the functions as Central Ground Water Authority (CGWA) to regulate and control the development and management of ground water in the country since 1997.
- CGWB is headed by **Chairman, CGWB followed by 5 Members.** With its headquarters at Faridabad, CGWB has 18 Regional Offices, 17 Division Offices and 10 Unit Offices.

Key Functions:

- **Resource Assessment:** Periodically assesses groundwater availability, quality, and potential.
- **Monitoring:** Maintains extensive networks to track groundwater levels and quality.
- **Technology:** Develops and shares technologies for scientific groundwater management.
- **Regulation:** Assists in implementing policies for sustainable extraction and use, and acts as CGWA to regulate development.
- **Augmentation:** Promotes groundwater recharge and conservation.
- **Policy Support:** Provides scientific data for national and state-level groundwater planning.

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

Which one of the following has been constituted under the Environment (Protection) Act, 1986? (2022)

- (a) Central Water Commission
- (b) Central Ground Water Board
- (c) Central Ground Water Authority**
- (d) National Water Development Agency

Source: <https://www.thehindu.com/news/national/andhra-pradesh/cgwb-report-flags-widespread-contamination-of-groundwater-in-andhra-pradesh/article70497681.ece/amp/>

7. Carbon Border Adjustment Mechanism (CBAM)

Q. Which of the following goods are covered under the EU's CBAM?

- 1. Cement
- 2. Steel
- 3. Aluminium
- 4. Fertilisers
- 5. Electronics

Select the answer using the code given below:

- (a) 1, 2, 3, 4 only
- (b) 1, 2, 3, 5 only
- (c) 2, 3, 4, 5 only
- (d) All of the above

Answer: (a) 1, 2, 3, 4 only

Explanation:

In NEWS: CBAM isn't the end, it could be start of a green story

Carbon Border Adjustment Mechanism (CBAM):

- CBAM is a **carbon tariff imposed by the European Union** on selected carbon-intensive imports.
- Its purpose is to **align carbon costs of imported goods with the EU Emissions Trading System (ETS)**.
- CBAM aims to **prevent carbon leakage, ensure fair competition, and promote global decarbonization**.
- Initially, it covers **cement, iron & steel, aluminium, fertilisers, electricity, and hydrogen**. **Hence 1, 2, 3, 4 are correct.**
- Importers must **report embedded carbon emissions** of imports.
- From **2026**, importers must **buy CBAM certificates** corresponding to emissions.
- **Carbon price already paid** in the exporting country can be **deducted** from CBAM liability.
 - **2023-2025**: Transitional phase – reporting only, no payment.
 - **2030-2034**: Expansion of scope and phase-out of free EU ETS allowances.
- CBAM is **WTO-compliant** as it treats foreign and domestic producers equally.
- It is a **pioneering measure** influencing carbon pricing and trade policies globally.

PYQ REFERENCE: (2011)

Q. Regarding "carbon credits", which one of the following statements is not correct?

- (a) The carbon credit system was ratified in conjunction with the Kyoto Protocol
- (b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota
- (c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission
- (d) Carbon credits are traded at a price fixed from time to time by the United Nations Environment Programme**

Source:

<https://indianexpress.com/article/opinion/columns/cbam-isnt-the-end-it-could-be-start-of-a-green-story-10455471/>

8. India's Climate Targets

Q. Which among the following statements are correct with respect to India's Climate Targets?

- 1. To reduce GDP emission intensity by 35% by 2030 compared to 2005 levels.
- 2. To achieve 500 GW of non-fossil energy capacity by 2030.
- 3. To achieve Net Zero emissions by 2070.
- 4. To achieve 280 GW solar and 140 GW wind capacity by 2030.

Select the correct answer using the code given below.

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

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

Explanation:

In NEWS: India's progress on its climate targets

India's Climate Targets: Overview

- India is committed to tackling climate change while balancing **economic growth and energy access**. Its climate action is guided by the **Paris Agreement (2015)** and the **National Action Plan on Climate Change (NAPCC)**.

Paris Agreement Commitments (NDCs)

India's **Nationally Determined Contributions (NDCs)** under the Paris Agreement include:

- 1. **Emission Intensity Reduction**
 - Reduce **GDP emission intensity by 33-35% by 2030** (from 2005 levels). **Hence statement 1 is correct.**
- 2. **Renewable Energy Capacity**
 - Achieve **500 GW of non-fossil fuel-based energy capacity by 2030**. **Hence statement 2 is correct.**
- 3. **Clean Energy Share**
 - **50% of total electricity capacity from renewable sources by 2030.**
- 4. **Carbon Sink Enhancement**
 - Create additional **2.5-3 billion tonnes of CO₂ equivalent carbon sink** through **afforestation and reforestation** by 2030.

5. Adaptation Measures

- Strengthen climate resilience in sectors like **agriculture, water resources, health, and ecosystems.**

Net Zero Target

- India has **pledged to achieve Net Zero emissions by 2070**, which is **20 years later than developed countries' 2050 goal. Hence statement 3 is correct.**
- Emphasises **phased transition**, focusing on energy access and economic development.

Renewable Energy Goals

- **Solar Energy:** 280 GW by 2030
- **Wind Energy:** 140 GW by 2030 **Hence statement 4 is correct.**
- Part of **500 GW non-fossil capacity** target.
- Recent initiatives include:
 - **International Solar Alliance (ISA)** for global solar promotion
 - **Green Hydrogen Mission** to decarbonize industry and transport

Energy Efficiency and Transport

- **Perform, Achieve and Trade (PAT) Scheme** for energy-intensive industries
- **Faster Adoption and Manufacturing of Hybrid & Electric Vehicles (FAME)** program
- Focus on **energy efficiency, clean fuels, and sustainable urban transport**

Climate Finance and International Cooperation

- India seeks **climate finance** from developed countries to support clean energy and adaptation measures.
- Participates in international initiatives like:
 - **NDC Partnership**
 - **Global Solar Alliance**
 - **Coalition for Disaster Resilient Infrastructure (CDRI)**

PYQ REFERENCE: (2016)

Q. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct?

1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2°C or even 1.5°C above pre-industrial levels.
3. Developed countries acknowledged their historical responsibility in global warming and committed to donate \$1000 billion a year from 2020 to help developing countries to cope with climate change.

Select the correct answer using the code given below.

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

Source: <https://www.thehindu.com/business/Economy/indias-progress-on-its-climate-targets/article70481985.ece>

9. Bharat Climate Forum 2026

Q. Consider the following statements:

1. Bharat Climate Forum is a statutory multi-stakeholder platform to shape actionable climate strategies in India.
2. BCF promotes “Make in India” climate solutions, with emphasis on domestic clean-tech manufacturing.
3. It is co-anchored by the Council for International Economic Understanding (CIEU) and Dalberg Advisors.
4. The Forum focuses on sectors like solar, wind, green hydrogen, e-mobility, batteries and bioenergy.
5. The Forum functions under the Ministry of Environment, Forest and Climate Change as a formal institutional mechanism.

Which of the statements given above are correct?

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

Answer: (c) 2, 3 and 4 only

Explanation:

In NEWS: Vice-President Shri.C. P. Radhakrishnan Addresses Bharat Climate Forum 2026

Bharat Climate Forum:

- **Bharat Climate Forum (BCF)** is a **national multi-stakeholder platform** that brings together government, industry, finance, academia and civil society to shape climate action and climate-friendly economic strategies in India.
- It is **co-anchored by the Council for International Economic Understanding (CIEU) and Dalberg Advisors** - independent partners working with public and private stakeholders. **Hence statement 3 is correct.**
- The Forum’s agenda focuses on **“Make in India” climate solutions**, especially **accelerating domestic clean-technology manufacturing** to support climate goals and reduce import dependence. **Hence statement 2 is correct.**
- **Bharat Climate Forum 2025** was held on **10 January 2025** at New Delhi, with participation from policymakers, industry leaders and experts to discuss scaling clean-tech manufacturing and self-reliance (Atmanirbhar Bharat) for climate goals.
- The event led to the launch of the **Bharat Cleantech Manufacturing Platform**, aimed at unifying stakeholders across policy, industry, finance and research to build domestic clean-tech manufacturing capacity.
- Priority focus sectors discussed in the Forum include **solar energy, wind energy, green hydrogen, e-mobility, battery energy storage and bioenergy. Hence statement 4 is correct.**
- The Forum is a **dialogue and strategy platform, not a statutory, regulatory, or executive government body, and it does not implement laws or regulations. Not under any ministry. Hence statements 1 and 5 are incorrect.**
- BCF events also include thematic summits such as **Aironomics 2025** (for clean air and climate strategy), besides the flagship annual climate forum.

PYQ REFERENCE: (2025)

Q. Consider the following statements:

Statement I: At the 28th United Nations Climate Change Conference (COP28), India refrained from signing the 'Declaration on Climate and Health'.

Statement II: The COP28 Declaration on Climate and Health is a binding declaration; and if signed, it becomes mandatory to decarbonize the health sector.

Statement III: If India's health sector is decarbonized, the resilience of its health-care system may be compromised.

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://www.pib.gov.in/PressReleasePage.aspx?PRID=2212832®=3&lang=1>

10. Bio-Bitumen

Q. The adoption of bio-bitumen technology in India can result in which among the following outcomes?

1. Reduction of greenhouse gas emissions
2. Value addition to agricultural residue
3. Sustainable infrastructure with short lifespan
4. Realisation of circular economy principles
5. Lowering economic costs

Select the correct answer using the code given below:

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

Answer: (a) 1, 2, 4 and 5 only

Explanation:

In NEWS: A new sustainable road-building technology called bio-bitumen via pyrolysis, developed jointly by CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi and CSIR-Indian Institute of Petroleum (CSIR-IIP), Dehradun has been successfully transferred for commercial adoption.

Bio-bitumen:

- Bio-bitumen is produced from agricultural farm residues (like post-harvest rice straw) using **pyrolysis**, which converts biomass into bio-oil that is blended with conventional bitumen for roads.
- Field trials such as a 100-metre road stretch on the Jorabat-Shillong Expressway (NH-40) in Meghalaya have shown feasibility and performance comparable to conventional bitumen.
- Controlled thermal decomposition of rice straw produces bio-oil, bio-char and gaseous products.

- Rice straw is densified into pellets and processed through pyrolysis to obtain bio-oil, which is further upgraded into a bio-binder suitable for flexible pavement applications.
- Bio-binder is used in hot mix asphalt with conventional equipment and practices.

Rice Straw → Pyrolysis → Bio-Oil → Bio-Binder → Flexible Pavements

Applications of Bio bitumen:

- **Road Construction (Asphalt Paving):** The biggest application, used in hot mix asphalt for highways, bypasses, and local roads, often as a partial replacement or modifier for conventional bitumen.
- **Waterproofing:** Excellent for making structures airtight and waterproof, including roofs, basements, and marine environments.
- **Sealing & Coatings:** Functions as a sealant and protective coating for various surfaces, offering durability and water resistance.

Advantages

- Reduces reliance on imported bitumen potentially replacing 20–30% of conventional bitumen, **lowering costs** and environmental footprint.
- Supports sustainable infrastructure with **longer lifespan** and less pollution. **Hence 3 is incorrect.**
- Aligns with strategic goals like Atmanirbhar Bharat, waste-to-wealth approaches (using farm residue), and **circular economy** principles.
- Could cut import costs of bitumen by an estimated ₹25,000–30,000 crore annually.
- The pyrolysis process produces other useful by-products like energy-efficient gaseous fuel, bio-pesticide fractions, and high-grade carbon for advanced applications (e.g., batteries, water purification).
- Potential annual savings of ₹4,000 - 4,500 crore
- **Reduction of greenhouse gas emissions** by ~70%
- **Value addition to agricultural residue** and farmer income
- Alignment with Waste-to-Wealth Mission and sustainability goals

Hence 1, 2, 4 and 5 are correct.

PYQ REFERENCE: (2020)

Q. In rural road construction, the use of which of the following is preferred for ensuring environmental sustainability or to reduce carbon footprint?

1. Copper slag
2. Cold mix asphalt technology
3. Geotextiles
4. Hot mix asphalt technology
5. Portland cement

Select the correct answer using the code given below:

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2212118®=3&lang=1>

11. Olive Ridley

Q. Consider the following statements regarding the Olive Ridley Sea Turtle:

1. The Olive Ridley sea turtle is the smallest and the least abundant of all sea turtle species found in the world.
2. It is found mainly in the Pacific and Indian Oceans but is also present in the warm waters of the Atlantic Ocean.
3. Olive Ridley turtles exhibit both solitary nesting and mass nesting known as arribada.
4. Olive Ridley sea turtles are strictly herbivorous in nature.
5. Operation Olivia is carried out by the Indian Coast Guard to protect turtle nesting sites.

Which of the statements given above is/are correct?

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

Answer: (b) 2, 3 and 5 only

Explanation:

In NEWS: Olive Ridley deaths raise concern as new nesting season begins in A.P.

Olive Ridley Sea Turtle:

- The Olive Ridley sea turtle (*Lepidochelys olivacea*) belongs to the family **Cheloniidae**.
- It is the **second-smallest** and the **most abundant** species among all sea turtles found globally. **Hence statement 1 is incorrect.**
- **Kemp's ridley** is the smallest of all sea turtle species
- Olive Ridley turtles are primarily distributed in the **Pacific and Indian Oceans**, and are also found in the **warm waters of the Atlantic Ocean**. **Hence statement 2 is correct.**
- The species prefers **warm and tropical marine waters** and is highly migratory in nature.
- Olive Ridley sea turtles are **omnivorous**, feeding on jellyfish, crabs, shrimps, molluscs, algae and small fish. **Hence statement 4 is incorrect.**
- The species exhibits **two types of nesting behaviour**: solitary nesting and synchronized mass nesting known as **arribada**. **Hence statement 3 is correct.**
- **Arribada nesting**, involving thousands of turtles nesting simultaneously, is **unique to Olive Ridley turtles** among sea turtle species.
- Female Olive Ridley turtles show **natal homing**, returning to the same beach where they were born to lay eggs.
- Olive Ridley turtles dig **conical nests about 1.5 feet deep** using their hind flippers.
- The **coast of Odisha** is one of the **largest mass nesting sites** of Olive Ridley turtles in the world.
- Major arribada nesting sites in India include **Gahirmatha, Rushikulya and the Devi River mouth** in Odisha.
- **Gahirmatha Marine Sanctuary** is the world's first marine sanctuary specifically established for the protection of sea turtles.
- Solitary nesting of Olive Ridley turtles occurs in **Lothian Island Wildlife Sanctuary (West Bengal)** and along parts of the **Coromandel Coast**.

- Globally, important mass nesting sites outside India are located along the coasts of **Mexico and Costa Rica**.
- The **sex of hatchlings** is determined by the temperature of the sand during incubation, with **higher temperatures producing more females**.
- Major threats to Olive Ridley turtles include **poaching and illegal egg collection**.
- **Incidental capture (bycatch)** in trawl nets and gill nets is a leading cause of mortality among Olive Ridley turtles.
- **Coastal development, artificial lighting and marine pollution** degrade nesting habitats and affect hatchling survival.
- **Climate change** poses a serious threat by altering nesting beaches and skewing hatchling sex ratios.
- Olive Ridley turtles are protected under **Schedule I of the Wildlife (Protection) Act, 1972**.
- The species is listed under **Appendix I of CITES**, prohibiting international commercial trade.
- **Operation Olivia** is conducted by the **Indian Coast Guard** to protect Olive Ridley turtles during their breeding and nesting season. **Hence statement 5 is correct.**
- **Turtle Excluder Devices (TEDs)** are mandated in fishing trawlers to reduce turtle mortality due to bycatch.
- Conservation of Olive Ridley turtles in India involves **legal protection, technological interventions, community participation and habitat protection**.
- Olive Ridley turtle conservation is an important example of **marine biodiversity protection linked with sustainable fisheries and coastal management**.

PYQ REFERENCE:

Q. The sea coast of which one of the following states has become famous as a nesting place for the giant Olive Ridley turtles from South America? [2002]

- (a) Goa
(b) Gujarat
(c) Orissa
(d) Tamil Nadu

Source:

<https://www.thehindu.com/news/cities/Visakhapatnam/olive-ridley-nesting-season-begins-in-andhra/article70470643.ece>

12. India's pygmy hog

Q. With reference to Pygmy Hogs, consider the following statements:

- I. They are solitary animals.
- II. They are keystone grassland species.
- III. They are classified as critically Endangered on the IUCN Red List.

Which of the statements given above is/are correct?

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

Answer: (c) II only

Explanation:

In NEWS: A little pig goes a long way - India's pygmy hog is vanishing from its grasslands, just as it is needed the most

- The pygmy hog inhabits tall wet grasslands of the sub-Himalayan region.
- Once widespread across northern India and parts of Nepal, its current wild population survives only in Assam, mainly in and around Manas and Orang landscapes.
- Adult pygmy hogs are extremely small, measuring about 60–65 cm in length and weighing 8–9 kg.
- They have dark brownish coats, a tapered head, short tail, and small visible canines in males.
- Lifespan in the wild is estimated at 8–14 years.
- Pygmy hogs are **social animals** that live in small family groups.

Hence statement 1 is incorrect.

- They dig grass nests for shelter, foraging primarily for roots, tubers, insects and other small food items.
- Breeding is seasonal, with litters of 2–6 piglets after a gestation of about 100 days.
- Ecologically, the pygmy hog is a **keystone grassland species**.

Hence statement 2 is correct.

- The species faced near extinction due to rapid loss and degradation of grasslands, caused by unregulated burning, overgrazing, agricultural expansion, and habitat succession.
- These pressures drastically reduced both habitat quality and population numbers.
- A major conservation turnaround began in **1995 with the launch of the Pygmy Hog Conservation Programme (PHCP)**, involving captive breeding, habitat management, and systematic reintroduction into protected grasslands.
- The pygmy hog is classified as **Endangered** on the IUCN Red List, listed under CITES Appendix I, and is accorded the highest level of legal. **Hence statement 3 is incorrect.**



PYQ REFERENCE: (2013)

Q. Consider the following:

1. Star tortoise
2. Monitor lizard
3. Pygmy hog
4. Spider monkey

Which of the above are naturally found in India?

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

Source: <https://www.downtoearth.org.in/wildlife-biodiversity/a-little-pig-goes-a-long-way>

13. Madras hedgehog

Q. Consider the following statements with reference to Madras hedgehog:

1. It is a nocturnal mammal endemic to peninsular India.
2. It survives in dense forests.
3. It rolls up to reduce the chance of being captured by predators.

Which of the statements given above are correct?

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

Answer: (d) 1 and 3 only

Explanation:

In NEWS: Under moonlit scrub - Survival of this hidden guardian tells us whether our scrublands still breathe

- Madras hedgehog (*Paraechinus nudiventris*), a little-known, nocturnal mammal is endemic to peninsular India, especially in Tamil Nadu, Kerala, Andhra Pradesh, and parts of Karnataka. **Hence statement 1 is correct.**
- This small species, also called the **bare-bellied hedgehog**, survives in **dry scrublands, thorn forests, grasslands, and scrub edges of farmlands, avoiding dense forests.** **Hence statement 2 is incorrect.**
- At night it forages for insects, worms, snails, and small reptiles, acting as a natural pest controller and contributing to soil aeration, an important ecological function in dry ecosystems.
- The Madras hedgehog weighs about 130–315 g and lives roughly **five to six years.**
- It is well adapted to arid landscapes: its quills protect against predators such as foxes, jackals, and mongooses, and **it curls into a tight ball when threatened.** **Hence statement 3 is correct.**
- Its **poor eyesight** is compensated by keen smell and hearing.
- Despite its ecological role and endemic status, the species is overlooked and under-studied, and its population trends are uncertain.
- Major threats include habitat loss due to agriculture, plantations, and infrastructure development (such as wind and solar projects), poaching, and road mortality.
- Cultural myths about medicinal properties of its body parts have also led to **illegal hunting in some areas.**



PYQ REFERENCE: (2021)

Q. Consider the following animals:

1. Hedgehog
2. Marmot
3. Pangolin

To reduce the chance of being captured by predators, which of the above organisms rolls up/roll up and protects/protects its/their vulnerable parts?

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

Source: <https://www.downtoearth.org.in/wildlife-biodiversity/under-moonlit-scrub>

14. Grey slender loris

Q. With reference to the 'Grey slender loris', consider the following statements:

1. Grey slender loris is a nocturnal, arboreal primate native to India and Sri Lanka.
2. It is mainly insectivorous but also feeds on small vertebrates, fruits and plant matter.
3. In India, It is primarily found in the foothills of Himalayas.
4. It is listed as Near Threatened by IUCN and enjoys Schedule I protection under the Wildlife (Protection) Act, 1972.

How many of the statements given above are correct?

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

Answer: (c) Only three

Explanation:

In NEWS: Night watcher: Reverse mythical beliefs to save the nocturnal hunter of Western Ghats

Grey Slender Loris (*Loris lydekkerianus*):

- The Grey slender loris is a **small nocturnal primate** belonging to the family **Lorisidae**.

- It is **arboreal** and has **large forward-facing eyes** adapted for night vision. **Hence statement 1 is correct.**

Distribution

- Native to **India and Sri Lanka**.
- In India, it is found in parts of the **Western Ghats and Eastern Ghats**, especially in **southern India**. **Hence statement 3 is incorrect.**

Habitat

- Occurs in **tropical dry forests, moist deciduous forests, scrub forests and secondary forests**.
- Highly dependent on **continuous tree canopy** for movement.

Diet and Behaviour

- Primarily **insectivorous**.
- Also feeds on small vertebrates, fruits and plant matter. **Hence statement 2 is correct.**

- **Slow-moving**, silent climber, active mostly at night.

Subspecies

- There are **four subspecies** of the Grey slender loris.

Conservation Status

- Listed as **Near Threatened (NT)** on the **IUCN Red List**.
- Protected under **Schedule I of the Wildlife (Protection) Act, 1972** in India. **Hence statement 4 is correct.**

Threats

- **Habitat loss and fragmentation**.
- **Roadkills** due to forest fragmentation.
- **Illegal pet trade and hunting** in some regions.
- **Loss of canopy connectivity**.



PYQ REFERENCE: (2023)

Q. Consider the following statements regarding the Indian squirrels:

1. They build nests by making burrows in the ground.
2. They store their food materials like nuts and seeds in the ground.
3. They are omnivorous.

How many of the above statements are correct?

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

Source: <https://www.downtoearth.org.in/wildlife-biodiversity/night-watcher-reverse-mythical-beliefs-to-save-the-nocturnal-hunter-of-western-ghats>

15. Bactrian camel

Q. With reference to Bactrian camels, consider the following statements:

- I. They are double-humped camels.
- II. They thrive in extreme hot weather, surviving temperatures as high as 40°C.
- III. The humps store predominantly water.

Which of the statements given above is/are correct?

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

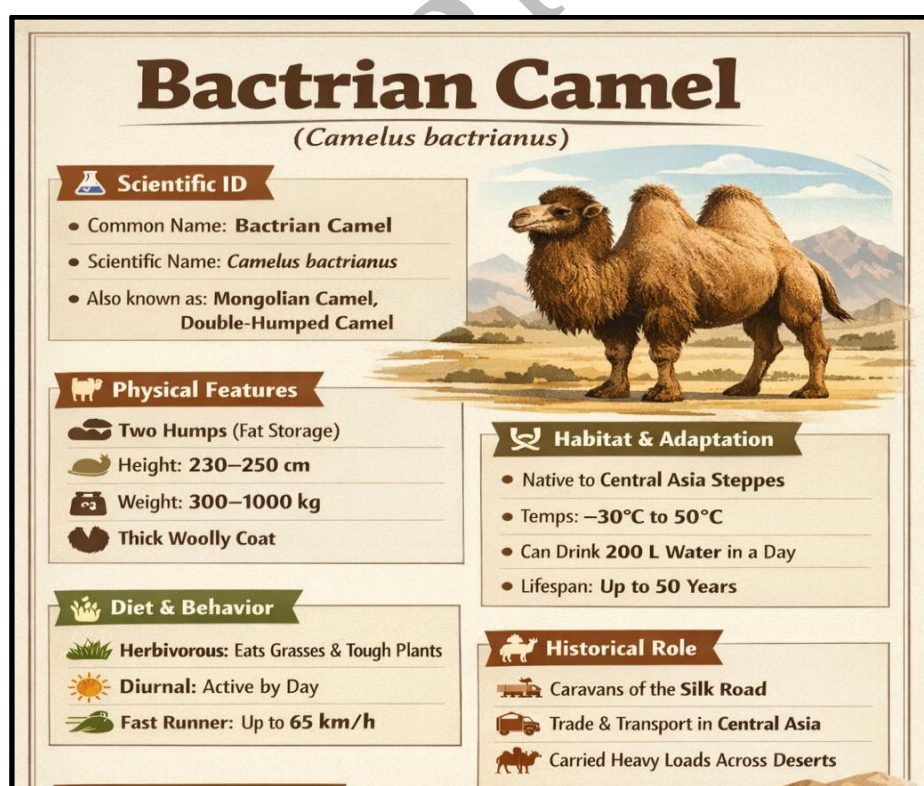
Answer: (b) I and III

Explanation:

In NEWS: Republic Day 2026: Bactrian camels are found only at this location in India and have a 6,000-year link to Mongolia and China

Bactrian camels

- Bactrian camels in India are a rare and unique population of **double-humped camels** found exclusively in the Nubra Valley of Ladakh. **Hence statement I is correct.**
- Locally known as Mundri camels, they are living relics of the ancient Silk Route.
- There are only about 365 to 400 of these camels remaining in India.
- Unlike the single-humped dromedaries of Rajasthan, **Bactrian camels thrive in extreme cold, surviving temperatures as low as -40°C. Hence statement II is incorrect.**
- The Two Humps humps **store fat, not water**, which the camels metabolise for energy during sparse winters. **Hence statement III is correct.**
- They can consume saline water and even snow to meet their hydration needs.
- They are **diurnal** (active by day) and rest at night.
- They have **double rows of long eyelashes and sealable nostrils to block sand and snow, plus broad feet that act like natural snowshoes.**



Military and Cultural Significance

Republic Day Debut: In January 2026, two Bactrian camels named 'Galwan' and 'Nubra' made history by marching in the Republic Day Parade as part of the Army's animal contingent.

Strategic Assets: The Indian Army uses them for patrolling the Line of Actual Control (LAC). They can carry up to 170–250 kg at altitudes of 17,000 feet, outperforming traditional mules in high-altitude logistics.

Tourism: In Hunder, Nubra Valley, camel safaris have become a major tourist attraction, which has helped revive the population from near extinction.

PYQ REFERENCE:

Q. What is/are unique about 'Kharai camel' a breed found in India? (2016)

1. It is capable of swimming up to three kilometres in seawater.
2. It survives by grazing on mangroves.
3. It lives in the wild and cannot be domesticated.

Select the correct answer using the code given below.

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

Source: <https://economictimes.indiatimes.com/news/new-updates/republic-day-2026-bactrian-camels-are-found-only-at-this-location-in-india-and-have-a-6000-year-link-to-mongolia-and-china/articleshow/127537442.cms>

16. The fishing cat

Q. With reference to fishing cats, which one of the following statements is not correct?

- (a) They have Water-resistant fur which keeps the body dry when swimming or stalking prey.
- (b) The males are larger than females.
- (c) In India, it occurs only along river basins of Mahanadi, Godavari and Krishna.
- (d) It is listed as vulnerable on the IUCN Red List.

Answer: (c) In India, it occurs only along river basins of Mahanadi, Godavari and Krishna.

Explanation:

In NEWS: The odd feline - The fishing cat's decline is not an isolated conservation woe. It is a symptom

Fishing cat:

- The fishing cat (*Prionailurus viverrinus*) is a medium-sized wild cat found in **South and Southeast Asia**.
- It has deep yellowish-grey fur with black lines and spots, and its body length ranges from about 57 cm to 78 cm with a 20–30 cm tail.
- **Males are larger than females**, weighing approximately 8–17 kg, while females weigh about 5–9 kg.
- The fishing cat lives mainly in and around **wetlands, including rivers, streams, oxbow lakes, swamps, and mangrove forests**, where it hunts primarily for fish.
- It also feeds on other animals such as birds, insects, small rodents, molluscs, reptiles (including snakes), amphibians, and carrion.

- The species is thought to be **primarily nocturnal** and is a good swimmer capable of swimming long distances and even underwater.
- It is listed as **vulnerable on the IUCN Red List** due to significant declines in population, largely from wetland destruction and human persecution.
- Its geographic distribution is broad but discontinuous, with records from Pakistan, India, Nepal, Bangladesh, and Sri Lanka in South Asia and scattered populations in Southeast Asia.



Special Adaptations

- **Semi-webbed feet** – help with wading through wetlands.
- **Water-resistant fur** – keeps the body dry when swimming or stalking prey.
- **Thick tail as a rudder** – aids in swimming.
- **Ear adaptations** – inner lobules can close when diving to keep water out.
- These traits allow it to hunt fish and other prey in rivers, marshes, and swamps.

Distribution in India

- In India, the fishing cat's range extends from the **Indus basin eastward along the Ganga-Brahmaputra floodplains and delta** into parts of Bangladesh.
- It also occurs south along other **river basins like the Mahanadi, Godavari and Krishna**, marking its southern distribution limit.

Hence option (c) is correct.

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.downtoearth.org.in/wildlife-biodiversity/the-odd-feline>

17. Nagauri Ashwagandha

Q. Nagauri Ashwagandha, a medicinal crop, which received the Geographical Indication (GI) tag in 2026, is cultivated in which among the following Indian states?

- (a) Gujarat
- (b) Madhya Pradesh
- (c) Uttar Pradesh
- (d) Rajasthan**

Answer: (d) Rajasthan

Explanation:

In NEWS: Centre Grants GI Tag to Nagauri Ashwagandha

Nagauri Ashwagandha:

- **Nagauri Ashwagandha** has been granted the **Geographical Indication (GI) tag** by the Centre in **January 2026**.
- It is associated with **Nagaur district of Rajasthan**, located in the **Marwar region**.
- Nagauri Ashwagandha is **Rajasthan's second GI-tagged agricultural product**, after **Sojat Mehendi**. **Hence option (d) is correct.**
- The GI tag provides **legal protection** and prevents **misuse and adulteration** of the product's name.
- Nagaur's **dry climate and sandy soil** are ideally suited for Ashwagandha cultivation.
- Nagauri Ashwagandha is known for its **longer and thicker roots** with a **high concentration of medicinal alkaloids**.
- Its berries are distinguished by a **dark, bright red colour**, indicating superior quality.
- Ashwagandha is a **medicinal plant widely used in Ayurveda**.
- GI recognition is expected to **enhance export potential**, ensure **premium pricing**, and improve **farmers' income**.
- Rajasthan currently has **22 GI-certified products**, including **Bikaneri Bhujia, Makrana Marble, and Kota Doria**.
- Ashwagandha is cultivated on approximately **5,000 hectares in India**, with a production of around **1,600 tonnes** annually.



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

Source: <https://www.gktoday.in/centre-grants-gi-tag-to-nagauri-ashwagandha/>

18. Coringa Wildlife Sanctuary

Q. Coringa Wildlife Sanctuary is primarily associated with which type of ecosystem?

- (a) Alpine forest
- (b) Mangrove
- (c) Grassland
- (d) Desert

Answer: (b) Mangrove

Explanation:

In NEWS: Greater flamingos (*Phoenicopterus roseus*) are sighted on Hope Island in Coringa Wildlife Sanctuary in the Kakinada Bay of Andhra Pradesh for the first time this season on Tuesday.

Coringa Wildlife Sanctuary:

- Coringa Wildlife Sanctuary is an estuarine wildlife sanctuary located near Kakinada in **Andhra Pradesh**, India, covering about 235.7 km² and governed by the Andhra Pradesh Forest Department.
- It was established on 5 July 1978 to protect the unique **mangrove-estuary ecosystem**. **Hence option (b) is correct.**
- The sanctuary is part of the **Godavari estuary and represents the third largest stretch of mangrove forests in India**, with 24 mangrove tree species and more than 120 bird species recorded.
- Its intricate mangrove root systems help stabilise the coastline, reduce erosion, and provide habitat and nursery grounds for fish and other aquatic life.

Flora:

- Dominated by rich **mangrove vegetation**, including species such as *Avicennia officinalis*, *Avicennia marina*, *Rhizophora mucronata*, and *Sonneratia apetala*.

Fauna:

- Birds: Includes critically endangered species like the **white-backed vulture and long-billed vulture**, and diverse waterbirds such as **herons, egrets, flamingos**, and more.
- Other wildlife includes **golden jackal, sea turtles, fishing cats**, and a healthy population of smooth-coated otters. Notably, the sanctuary has an 18-km sand pit where **Olive Ridley sea turtles nest from January to March each year.**



Geography & Habitat:

- The sanctuary lies on the deltaic branches of the Godavari and Gouthami Rivers at Kakinada Bay, with extensive backwaters and marsh vegetation.

Threats:

- Mangrove exploitation for fuelwood, poaching, habitat destruction, and pressures from industrialisation and aquaculture are among the key conservation challenges. Efforts are ongoing to protect and restore the mangrove ecosystem.

Greater Flamingo (*Phoenicopterus roseus*)

Physical Characteristics

- 110~150 cm tall, 2~4 kg; large males up to 187 cm
- Pinkish-white plumage, red wing coverts, black flight feathers
- Pink bill with black tip, bright pink legs
- Gray chicks, turn pink as they mature

Habitat & Distribution

Lagoons, Mudflats, Estuaries, Coastal Lakes

Old World Range
Africa • India • Middle East • Southern Europe

Ecology

- Nests on Mud Mounds
- Eggs & chicks vulnerable to gulls & raptors

Conservation Status

Least Concern

Threats: Pollution & Habitat Loss

PYQ REFERENCE: (2004)

Q. Match List I (National Park/Sanctuary) with List II (State) and select the correct answer using the codes given below:

- | | |
|-------------------------------|---------------------|
| List-I | List-II |
| A. Kanger Ghati National Park | 1. Chhattisgarh |
| B. Nagerhole National Park | 2. Haryana |
| C. Kugti Wildlife Sanctuary | 3. Himachal Pradesh |
| D. Sultanpur Bird Sanctuary | 4. Karnataka |

- Codes :**
- (a) A-3; B-2; C-1; D-4
 - (b) A-1; B-4; C-3; D-2
 - (c) A-3; B-4; C-1; D-2
 - (d) A-1; B-2; C-3; D-4

Source: <https://www.thehindu.com/news/national/andhra-pradesh/70-greater-flamingos-arrive-at-hope-island-largest-sighting-in-the-estuary/article70557134.ece>

19. Valley of Flowers

Q. With reference to the Valley of Flowers National Park, consider the following statements:

1. It is located in the Eastern Himalayas and lies within the catchment area of the Brahmaputra River.

2. It is a part of the Nanda Devi Biosphere Reserve and is recognized as a UNESCO World Heritage Site.
3. The Pushpawati River flows through the valley and is a tributary of the Alaknanda River.

Which of the statements given above are correct?

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

Answer: (a) 2 and 3 only

Explanation:

In NEWS: Uttarakhand seeks IAF's help as forest fire rages in Valley of Flowers for the fifth day. With forest fire raging in the Valley of Flowers, a UNESCO heritage site, for the last five days, the Uttarakhand Disaster Management Department has sought the Indian Air Force's (IAF) help to douse the inferno.

Valley of Flowers:

- The Valley of Flowers is a high-altitude alpine valley located in the Chamoli district of **Uttarakhand**.
- It lies in the **Western Himalayas** and forms part of the **Nanda Devi Biosphere Reserve**. **Hence statement 1 is incorrect.**
- The valley was declared a **National Park in 1982** and later recognized as a **UNESCO World Heritage Site**. **Hence statement 2 is correct.**
- It is known for its rich diversity of endemic alpine flora, including rare and endangered plant species.
- The valley remains snow-covered for most of the year and blooms with flowers during the monsoon season (June to September).
- It was discovered by British mountaineer Frank Smythe in 1931.
- The **Pushpawati River** flows through the valley and is a tributary of the **Alaknanda River**. **Hence statement 3 is correct.**
- The Valley of Flowers National Park is characterized by meadows, glaciers, and perennial streams.
- It provides habitat to several endangered fauna such as the snow leopard, Asiatic black bear, blue sheep, and Himalayan musk deer.
- Human habitation and grazing are prohibited within the core area to conserve its fragile ecosystem.

PYQ REFERENCE: (2015)

Q. Which one of the following National Parks has a climate that varies from tropical to subtropical, temperate and arctic?

- (a) Khangchendzonga National Park
- (b) Nadadevi National Park
- (c) Neora Valley National Park
- (d) Namdapha National Park**

Source:

<https://www.thehindu.com/news/national/uttarakhand/uttarakhand-seeksiafshelp-as-forest-fire-rages-in-valley-of-flowers-for-the-fifth-day/article70505591.ece>

20. Parvati-Arga Bird Sanctuary

Q. With reference to Parvati-Arga Bird Sanctuary, consider the following statements:

1. It is situated along the banks of the Mahanadi River.
2. The sanctuary is primarily known for migratory waterfowl and wading birds.
3. It is a designated Ramsar site under the Ramsar Convention.

How many of the statements given above are correct?

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

Answer: (b) Only two

Explanation:

In NEWS: Govt declares Parvati-Arga Bird Sanctuary as Eco-Sensitive Zone

Parvati-Arga Bird Sanctuary:

- **The Parvati-Arga Bird Sanctuary** is located in the Gonda district of **Uttar Pradesh (UP), India**.
- It is a **protected area for migratory and resident birds**, supporting rich avian biodiversity.
- The sanctuary is situated along the **banks of the Mahanadi and its tributaries**, providing wetlands and aquatic habitats. **Hence statement 1 is correct.**
- It is known for **seasonal migratory birds**, especially **waterfowl and waders**. **Hence statement 2 is correct.**
- The sanctuary plays a significant role in **conservation of wetland ecosystems** in central India.
- It is under the **jurisdiction of the Chhattisgarh Forest Department** and is protected as a **bird sanctuary**.
- Local communities engage in **eco-tourism and bird-watching activities**, supporting conservation awareness.
- Key species found include **spot-billed pelicans, painted storks, egrets, and various migratory ducks**.
- The sanctuary contributes to India's obligations under the **Ramsar Convention** principles, although it is **not yet a designated Ramsar site**. **Hence statement 3 is incorrect.**

PYQ REFERENCE: (2018)

Q. In which one of the following States is Pakhui Wildlife Sanctuary located?

- (a) Arunachal Pradesh**
- (b) Manipur
- (c) Meghalaya
- (d) Nagaland

Source: <https://www.newsonair.gov.in/government-declares-parvati-arga-bird-sanctuary-as-eco-sensitive-zone/>

21. Climate - Resilient Agriculture

Q. Consider the following:

1. Biotechnology
2. Biofertilizers
3. Biopesticides
4. genome-edited crops
5. AI-driven tools

Which of the above are used in Climate-resilient agriculture?

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

Answer: (d) 1, 2, 3, 4 and 5

Explanation:

In NEWS: Why does India need climate- resilient agriculture?

Climate-Resilient Agriculture:

- Climate-resilient agriculture aims to **sustain and enhance agricultural productivity** under climate variability and climate change.
- A large share of India's agricultural area is **rain-fed**, making it highly vulnerable to climate risks.
- Development of **drought, flood, salinity and heat tolerant crop varieties** is a core strategy of climate-resilient agriculture.
- Climate-resilient agriculture uses **biotechnology, biofertilizers, biopesticides, genome-edited crops, and AI-driven tools** to enhance farm productivity while reducing dependence on chemical inputs. **Hence all are correct.**
- **Precision agriculture technologies** such as satellite imagery, GIS, AI and IoT support climate adaptation through improved weather forecasting and input efficiency.
- **Micro-irrigation systems** (drip and sprinkler) increase water-use efficiency and reduce climate-induced crop stress.
- **Conservation agriculture** practices like minimum tillage, residue retention and crop rotation improve soil health and resilience.
- **Millets and pulses** are climate-resilient crops due to their low water requirement and tolerance to abiotic stress.
- **Agroforestry systems** enhance climate resilience by diversifying farm income and improving carbon sequestration.
- **Weather-based and index-based crop insurance** are important non-structural measures supporting climate-resilient agriculture.
- Climate-resilient agriculture includes **crop, livestock, fisheries and allied sectors** for comprehensive adaptation.

PYQ REFERENCE: [2018]

Q. With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following fall under the Conservation Agriculture?

1. Avoiding the monoculture practices
2. Adopting minimum tillage
3. Avoiding the cultivation of plantation crops
4. Using crop residues to cover soil surface
5. Adopting spatial and temporal crop sequencing/crop rotations

Select the correct answer using the code given below:

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

Source: <https://www.thehindu.com/sci-tech/science/why-does-india-need-climate-resilient-agriculture-explained/article70460248.ece>

22. Inland Rainbow Trout Farm

Q. With reference to Rainbow Trout farming in India, consider the following statements:

1. Rainbow Trout is a cold-water fish species traditionally farmed in Himalayan states.
2. India's largest inland Rainbow Trout farm is located in Himachal Pradesh.

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: India's Largest Inland Rainbow Trout Farm Inaugurated in Telangana

India's Largest Inland Rainbow Trout Farm:

- Inaugurated in **Ranga Reddy district, Telangana** on **6 January 2026**. **Hence statement 2 is incorrect.**
- **Union Ministers Rajiv Ranjan Singh** (Fisheries) and **G Kishan Reddy** attended the inauguration.
- It is India's **largest integrated inland Rainbow Trout farm**.
- The project is established by **SmartGreen Aquaculture** with an investment of **₹50 crore**.
- Marks the **first major cold-water aquaculture initiative outside Himalayan regions**. **Hence statement 1 is correct.**
- Cultures **Rainbow Trout**, a cold-water fish species, under **controlled inland conditions**.
- Uses **advanced engineering** to regulate **water temperature, oxygen, and circulation**.
- Combines **breeding, rearing, and processing** at a single site to improve efficiency.
- Demonstrates that **technological innovation can overcome climate constraints** for cold-water species.
- Supports **private sector participation, startups, and export promotion** through the **National Fisheries Development Board (NFDB)**.
- Expected to **generate employment, diversify inland aquaculture, and enhance food security**.
- Telangana lies on the **Deccan Plateau**, a non-traditional region for trout farming.
- Traditional trout farming in India is limited to **Himalayan states** like Himachal Pradesh, Uttarakhand, and Jammu & Kashmir.

PYQ REFERENCE:

Q. Which one of the following agricultural practices is eco-friendly? [1999]

- (a) Organic farming
- (b) Shifting cultivation
- (c) Cultivation of high yielding varieties
- (d) Growing plants in glass-houses

Source:

<https://www.newindianexpress.com/cities/hyderabad/2026/Jan/06/indias-first-inland-trout-farm-starts-in-telangana>

23. Fisheries sector

Q. With reference to the Fisheries and Aquaculture sector in India, consider the following statements:

1. India is the world's second-largest fish producer and contributes about 8% to global fish production.
2. Fish production in India has more than doubled in the last decade.
3. Pradhan Mantri Matsya Sampada Yojana (PMMSY) supports inland fisheries, marine fisheries, fisheries infrastructure, ornamental fisheries, and seaweed cultivation.

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: Fish production has increased to 197.75 lakh tonnes in FY 2024-25 from 95.79 lakh tonnes fish production in FY 2013-14 increasing a significant 106%.

Fisheries & Aquaculture Sector in India:

- India is the **second-largest fish producer globally** and contributes about **8% to global fish production. Hence statements 1 is correct**
- Fish production in India increased from **95.79 lakh tonnes in FY 2013-14 to 197.75 lakh tonnes in FY 2024-25**, registering a growth of about **106%. Hence statements 2 is correct**
- The fisheries and aquaculture sector provides livelihoods to approximately **3 crore fishers and fish farmers**.
- Fisheries contribute **7.43% to Agriculture Gross Value Added (GVA)**, the highest among agri and allied sectors.
- Average aquaculture productivity in India has increased to **4.77 tonnes per hectare**.
- Since 2014-15, government schemes in the fisheries sector have generated about **74.66 lakh direct and indirect employment opportunities**.
- India ranks **second globally in aquaculture production** and is the **largest producer and exporter of shrimp**.
- Cumulative central government investment approved or announced for fisheries development since 2015 is about **₹38,572 crore**.
- **Pradhan Mantri Matsya Sampada Yojana (PMMSY)** supports inland fisheries, marine fisheries, fisheries infrastructure, ornamental fisheries, and seaweed cultivation. **Hence statements 3 is correct**

- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF)** focuses on creation of fishing harbours, fish landing centres, cold chain, and processing infrastructure.

- The **Kisan Credit Card (KCC)** facility was extended to fishers and fish farmers from **2018-19** to meet working capital requirements.

- Under social security measures, **Group Accidental Insurance** coverage has been provided to more than **34 lakh fishers**.

- India exported **16.98 lakh tonnes of seafood worth ₹62,408 crore** during **2023-24**.

- **Aquaculture contributes about 62% of India's seafood export value**, indicating a shift towards farmed fisheries.

- The Government of India has notified **rules for sustainable harnessing of fisheries in the Exclusive Economic Zone (EEZ)** with priority to Fisher Cooperatives and FFPOs.

PYQ REFERENCE: (2018)

Q. Consider the following statements:

1. The quantity of imported edible oils is more than the domestic production of edible oils in the last five years.
2. The Government does not impose any customs duty on all the imported edible oils as a special case.

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=2213532®=3&lang=1>

24. Soybean Production & Trade

Q. Consider the following statements:

1. Brazil and the USA together account for 70% of the global soybean exports.
2. China is the largest soybean importer in the world.
3. In India, Madhya Pradesh has the largest soybean production, accounting for almost 50% of the nation's output.

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: China to Boost Brazilian Soybean Imports in Early 2026 Amid Price Advantage

Soybean:

- Soybean (Glycine max) is a **legume crop** rich in protein and oil.
- It is used for **edible oil, soymeal (animal feed), and industrial products**.

- Major soybean-producing countries: **USA, Brazil, Argentina, China, and India.**
- Soybean is a **short-day, warm-season crop**, sensitive to frost.

Global Production & Trade

- **Brazil and the USA** are the top two global soybean exporters, accounting for over 70% of world trade. **Hence statement 1 is correct.**
- China is the **largest soybean importer**, primarily to meet domestic feed demand for its livestock sector. **Hence statement 2 is correct.**
- Global soybean trade is influenced by:
 - **Weather and crop yields** (e.g., Brazil's record harvest)
 - **International tariffs and trade agreements**
 - **Global livestock feed demand**, particularly from China
- The **US-China trade tensions and tariffs** significantly affect global soybean flows.
- Brazil often gains export share when **US soybeans are relatively expensive or tariffed.**
- Soybean prices are **highly sensitive to global currency fluctuations**, especially USD/BRL and USD/CNY.

India & Soybean

- India is a **soybean-producing and consuming country**, mainly for **edible oil and soymeal.**
- Major soybean-growing states in India: **Madhya Pradesh, Maharashtra, Rajasthan, and Karnataka.**
 - **Madhya Pradesh** has the largest soybean production in India, accounting for **almost 50%** of the nation's output. **Hence statement 3 is correct.**
- India exports **soymeal** but imports **soy oil and occasionally soybeans** to meet domestic consumption.
- India's soybean production has grown due to **expansion of oilseed cultivation and improved seed varieties.**
- India is affected by **global soybean prices**, since soymeal is a key input for **poultry, dairy, and livestock industries.**

Recent Market Trends

- **China's soybean imports** dominate global trade, often impacting prices worldwide.
- Seasonal dynamics: **Brazilian soybean harvest (Jan-Mar)** affects early-year supply, **US harvest (Sep-Nov)** affects late-year supply.
- Trade flows are influenced by: **price competitiveness, supply availability, and logistics costs.**
- Geopolitical or trade policy decisions (e.g., **US-China trade deals**) can **shift sourcing between Brazil and USA.**
- Global soybean demand is **projected to increase** with rising meat consumption in Asia.

PYQ REFERENCE: (2014)

Q. Consider the following pairs

Region **Well-known for the production of**

1. Kinnaur : Areca nut
2. Mewat : Mango
3. Coromandel : Soya bean

Which of the above pairs is/are correctly matched?

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

Source: <https://www.econotimes.com/China-to-Boost-Brazilian-Soybean-Imports-in-Early-2026-Amid-Price-Advantage-1732066>

25. India in rice production

Q. Consider the following statements:

Statement I: India became the world's largest rice producer in the 2024-25 crop year.

Statement II: There is significant rise in area under paddy cultivation and improvements in rice production over decades 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 Statement II is not correct but
- (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 has surpassed China in rice production. But this love for paddy is not without pitfalls

- India became the **world's largest rice producer in the 2024-25 crop year**, producing about 150 million metric tonnes, surpassing China's 145.28 million metric tonnes and accounting for roughly 28% of global rice output.
- The increase is due to both a rise in area under paddy cultivation and improvements in production over decades, although yield levels vary significantly across states. **Hence both Statement I and Statement II are correct and Statement II explains Statement I.**
- Despite the achievement, there are challenges: paddy is highly water intensive, leading to groundwater depletion in several regions, and excessive reliance on paddy raises concerns about crop diversification, nutritional security, and sustainability.
- The government is focusing on promoting crop diversification and incentivising farmers to grow alternative crops to address issues related to water use, monoculture dependence, and ecological stress.

Key Trends & Drivers:

- **Consistent Growth:** Rice output has grown steadily since the Green Revolution, with significant recent expansion.
- **Record Production:** India achieved record foodgrain and rice harvests in recent years, including 2023-24 and projected for 2024-25.
- **Area Expansion:** Paddy cultivation area has increased, notably from 43.66 million hectares (2019-20) to over 51 million hectares (2024-25).
- **Yield Improvement:** Yields have risen due to better seeds, pest management, and nutrient efficiency.
- **Global Dominance:** India's share of global rice production is around 28%, solidifying its position as the world's largest exporter.

PYQ REFERENCE:

Q. Which of the following factors/policies were affecting the price of rice in India in the recent past? (2020)

1. Minimum Support Price
2. Government's trading
3. Government's stockpiling
4. Consumer subsidies

Select the correct answer using the code given below:

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

Among the following, which one is the largest exporter of rice in the world in the last five years? (2019)

- (a) China
(b) India
 (c) Myanmar
 (d) Vietnam

Source: <https://indianexpress.com/article/explained/explained-economics/india-has-surpassed-china-in-rice-production-but-this-love-for-paddy-is-not-without-pitfalls-10475138/>

26. "Kaladi"

Q. "Kaladi", recently in the news for upscaling under the One District One Product (ODOP) initiative, is:

- (a) A millet-based product from Chhattisgarh
- (b) A traditional dairy product from Udhampur, Jammu & Kashmir
- (c) A herbal medicinal formulation from Himachal Pradesh
- (d) A fermented fish product from Odisha

Answer: (b) A traditional dairy product from Udhampur, Jammu & Kashmir

Explanation:

In NEWS: Udhampur's GI-tagged "Kaladi" to be upscaled for diverse food recipes using advanced food technologies

Kaladi – GI-tagged Traditional Dairy Product of Udhampur

- Traditional stretchy, milky cheese-like dairy product from Udhampur district, Jammu & Kashmir. **Hence option (b) is correct.**
- Made from raw full-fat milk using whey water as a coagulant.
- Nicknamed the "Mozzarella of Jammu" due to its stretchable texture.
- Recently received Geographical Indication (GI) tag.

Government Initiative

- **ODOP (One District One Product)** program identifies Kaladi for technology-driven upscaling and market expansion.
- Focus on:
 - Value addition
 - Shelf-life enhancement
 - Diversification into new food recipes
 - National and international marketing

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2217025®=3&lang=1>

ECONOMY

1. Non-tax revenue

Q. Which of the following are examples of Non-Tax Revenue of the Central Government?

1. Toll charges collected on national highways
2. Interest received on loans given to State governments
3. Estate duty on the total value of property of a deceased person at the time of death.
4. Licence fee for mining operations

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: Non-tax revenue touches ₹77,000 cr.

Non-Tax Revenue:

- **Non-tax revenue** refers to income earned by the government from sources other than taxes.
- **Commercial revenue** is income received from prices paid by people for goods and services provided by the government.
 - *Examples:* Railway passenger fares and freight charges, electricity charges, postal services and sale of stamps, toll charges on highways.**Hence 1 is correct.**
- **Administrative revenue** arises from the administrative and sovereign functions of the government.
 - **Fees** are charged for specific services rendered by the government.
 - *Examples:* Passport fees, court fees, government hospital charges, examination and education fees.
 - **Fines and penalties** are imposed on individuals or institutions for violation of laws and regulations.
 - *Examples:* Traffic fines, penalties for environmental violations, court-imposed fines.
 - **Licence and permit fees** are charged to regulate certain activities.
 - *Examples:* Mining licence fees, spectrum usage charges, liquor shop licences. **Hence 4 is correct.**
 - **Escheat** refers to income received by the government from property that has no legal heir or claimant.
 - *Example:* Unclaimed property reverting to the government after the death of the owner without heirs.
 - **Interest receipts** constitute income earned by the government on loans advanced.
 - *Examples:* Interest on loans given to State governments, Union Territories, or Public Sector Enterprises. **Hence 2 is correct.**
 - **Profits and dividends from Public Sector Undertakings (PSUs)** form an important part of non-tax revenue.
 - *Examples:* Dividends from ONGC, Coal India, NTPC, and other CPSEs.

Note: Estate duty was a tax levied on the total value of property of a deceased person at the time of death. It was a form of direct tax, not linked to any service rendered by the government. **Hence 3 is incorrect.**

PYQ REFERENCE: (2017)

Q. Consider the following statements:

1. Tax revenue as a percent of GDP of India has steadily increased in the last decade.
2. Fiscal deficit as a percent of GDP of India has steadily increased in the last decade.

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/todays-paper/tp-business/non-tax-revenue-touches-rs-77000-cr/article70531775.ece>

2. India is now fourth largest economy

Q. With reference to India's GDP growth, consider the following statements:

Statement I: India has overtaken Japan to become the world's fourth largest economy.

Statement II: India's real GDP growth in Q2 of 2025-26 was the highest in the last six quarters.

Statement III: Private consumption was a major driver of GDP growth during this period.

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 Statement III is correct and that explain 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: India is now fourth largest economy, says govt.

India becomes the world's 4th largest economy:

- India has overtaken Japan to become the world's fourth largest economy, with a GDP of \$4.18 trillion, according to a government statement. **Hence statement I is correct.**
- The country is projected to surpass Germany and become the third largest economy by 2030, with an estimated GDP of \$7.3 trillion.

Strong economic growth

- **Real GDP growth:**
 - Q2 2025-26: 8.2%
 - Q1 2025-26: 7.8%
 - Q4 2024-25: 7.4%
- This marks a **six-quarter high**, showing resilience despite global trade uncertainties.
- Growth is mainly driven by **strong domestic demand**, especially **private consumption**. **Hence Both Statement II and Statement III are correct and both of them explain Statement I**

Global rankings and outlook

- **Largest economies:**
 1. United States
 2. China
 3. Germany
 4. **India**
- India is currently the **fastest-growing major economy** in the world.

Other positive indicators

- **Inflation** is below the lower tolerance limit
- **Unemployment** is declining
- **Exports** are improving
- **Credit flow** to businesses remains strong
- **Urban consumption** continues to strengthen

Long-term vision

- India aims to achieve **high middle-income status by 2047**, marking 100 years of independence.
- The government credits this trajectory to **structural reforms, economic stability, and social progress.**

PYQ REFERENCE: (2011)

Q. In the context of Indian economy, consider the following statements:

1. The growth rate of GDP has steadily increased in the last five years.
2. The growth rate in per capita income has steadily increased in the last five years.

Which of the statements given above is/are correct?

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

Source: <https://www.thehindu.com/business/Economy/india-is-now-fourth-largest-economy-says-govt/article70454619.ece>

3. Financial Stability Report (FSR)

Q. The Financial Stability Report in India is released by which one of the following?

- (a) Reserve Bank of India
- (b) Ministry of Finance
- (c) Securities and Exchange Board of India
- (d) Financial Stability and Development Council

Answer: (a) Reserve Bank of India

Explanation:

In NEWS: Financial system faces near-term risks from external uncertainties: Report

RBI – Financial Stability Report (FSR):

- The **Reserve Bank of India (RBI)** publishes the **Financial Stability Report (FSR)**. **Hence option (a) is correct.**
- The FSR highlights **near-term risks** to India's economy and financial system arising from **external uncertainties**.
- **Geopolitical tensions** and **global trade disruptions** are identified as key external risk factors.
- External shocks can increase **exchange rate volatility** and **dampen global trade**.
- Such uncertainties may **reduce corporate earnings** and **lower foreign investment flows** into India.
- A **sharp correction in U.S. equity markets** can influence **Indian equity markets**.
- Global equity market corrections can **tighten domestic financial conditions**.
- The global financial system remains vulnerable due to **stretched valuations of risk assets**.
- **Rising public debt levels** across countries add to systemic financial risks.
- Increasing **interconnectedness between banks and non-bank financial institutions (NBFIs)** heightens contagion risks.
- Rapid technological change is transforming the global financial landscape.
- Growth of **non-bank financial intermediation** presents both opportunities and new risks.
- Emerging risks include the rise of **stablecoins** and **private credit markets**.
- Despite global challenges, the **world economy in 2025 proved more resilient than anticipated**.
- India's economy remains **robust and resilient** despite a volatile external environment.
- India's economic resilience is supported by **strong domestic demand**.
- **Benign inflation** contributes to macro-financial stability in India.
- **Healthy balance sheets** of financial and non-financial firms strengthen the system.
- Banks and NBFIs in India are supported by **strong capital and liquidity buffers**.
- The RBI continues to build **policy guardrails** to protect the economy and financial system from external shocks.

PYQ REFERENCE: (2016)

Q. 'Global Financial Stability Report' is prepared by the

- (a) European Central Bank
- (b) International Monetary Fund**
- (c) International Bank for Reconstruction and Development
- (d) Organization for Economic Cooperation and Development

Source: <https://www.thehindu.com/business/financial-system-faces-near-term-risks-from-external-uncertainties-fsr/article70456991.ece>

4. Currency devaluation

Q. Consider the following statements regarding currency devaluation:

1. Devaluation is more effective when domestic inflation is significantly lower than global inflation.
2. Real Effective Exchange Rate (REER) adjusts nominal exchange rates for inflation differentials.
3. High import content of exports can dilute the benefits of currency depreciation.

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: (b) 2 and 3 only

Explanation:

In NEWS: The solution to the falling rupee lies in diplomacy

Currency Devaluation:

- **Currency devaluation** refers to a deliberate reduction in the value of a country's currency relative to other currencies.
- Devaluation is typically used to **boost exports by making them cheaper** in foreign markets.
- Devaluation is **more effective when domestic inflation is higher than foreign inflation**, creating a real price advantage. **Hence statement 1 is incorrect.**
- If domestic inflation is low or comparable to global inflation, devaluation **may not improve competitiveness**.

Real Effective Exchange Rate (REER)

- **REER** is the nominal exchange rate **adjusted for relative inflation** between a country and its major trading partners. **Hence statement 2 is correct.**
- REER reflects **competitiveness of goods and services internationally**.
- A **rise in REER** implies **loss of competitiveness**, while a fall implies gains.

Limitations & Trade-offs

- Devaluation can **raise the cost of imports**, leading to imported inflation.
- If exports have **high import content**, devaluation benefits are diluted as input costs rise. **Hence statement 3 is correct.**
- Devaluation may be **counterproductive** if capital outflows or speculative pressures dominate currency movements.
- Overuse of devaluation can **erode investor confidence** and affect financial stability.

PYQ REFERENCE: (2021)

Q. Consider the following statements:

The effect of devaluation of a currency is that it necessarily

1. Improves the competitiveness of the domestic exports in the foreign markets
2. Increases the foreign value of domestic currency
3. Improves the trade balance

Which of the above statements is/are correct?

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

Source: <https://www.thehindu.com/opinion/lead/the-solution-to-the-falling-rupee-lies-in-diplomacy/article70556822.ece>

5. Central bank digital currencies (CBDCs)

Q. With reference to Central Bank Digital Currency (CBDC), consider the following:

1. Enabling faster and more efficient digital payment systems.
2. Improving the transmission of monetary policy by the central bank.
3. Promoting financial inclusion by extending digital payments to the unbanked population.
4. Eliminating the use of physical currency in the economy.
5. Reducing transaction costs and cash handling expenses.
6. Curbing black money and enhancing transparency in financial transactions.

How many of the above are considered the advantages of using Central Bank Digital Currency (CBDC)?

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

Answer: (c) Only five

Explanation:

In NEWS: Include digital currency link on BRICS agenda: RBI to government

- Reserve Bank of India (RBI) has recommended to the government that a proposal connecting the central bank digital currencies (CBDCs) be included on the agenda for the 2026 BRICS summit

Central Bank Digital Currency (CBDC):

- CBDC stands for **Central Bank Digital Currency**, a **digital form of a country's fiat currency** issued and regulated by its central bank.
- Unlike cryptocurrencies like Bitcoin, CBDCs are **legal tender** and **centralized**, with value guaranteed by the government.
- CBDCs are designed to **complement cash**, not replace it, and are fully backed by the central bank. **Hence 4 is incorrect.**
- There are **two types of CBDCs**:
 - **Retail CBDC**: For general public and businesses (digital rupee for individuals).
 - **Wholesale CBDC**: For financial institutions, primarily for interbank settlements.
- **India's CBDC** is called the **Digital Rupee (₹)**, being issued by the **Reserve Bank of India (RBI)**.
- The **Digital Rupee** can be used for **retail payments, e-commerce, and remittances**.
- CBDCs are designed to provide **secure, fast, and low-cost digital transactions**, reducing dependence on cash.
- CBDCs enhance **financial inclusion** by bringing digital payments to people without access to traditional banking.
- They help **curb black money, reduce transaction costs, and increase transparency**.

- CBDCs **do not rely on private cryptocurrencies** or decentralized blockchains; they may use **centralized or hybrid distributed ledger technology (DLT)**.

- **Advantages of CBDCs** include efficiency in payments, monetary policy transmission, financial inclusion, and reduced cash handling costs.

- **Risks of CBDCs** include cybersecurity threats, privacy concerns, and potential disruption to commercial banks' deposit base.

- Several countries, including **China, Bahamas, Sweden, and Nigeria**, have already launched or piloted CBDCs.

- India launched **pilot projects for the Digital Rupee** in 2022 for both **wholesale and retail use cases**.

- RBI continues to explore the **expansion and integration of CBDCs** into mainstream financial and retail payments.

Hence option (c) is correct.

PYQ REFERENCE: (2023)

Q. With reference to Central Bank digital currencies, consider the following statements:

1. It is possible to make payments in a digital currency without using US dollar or SWIFT system.
2. A digital currency can be distributed with condition programmed into it such as a time-frame for spending it.

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/Economy/rbi-proposes-linking-brics-digital-currencies/article70525693.ece>

6. Export Preparedness Index (EPI)

Q. The Export Preparedness Index (EPI) 2024 is released by which of the following?

- (a) Ministry of Commerce and Industry
(b) Reserve Bank of India
(c) NITI Aayog
(d) Securities and Exchange Board of India

Answer: (c) NITI Aayog

Explanation:

In NEWS: NITI Aayog Releases Export Preparedness Index (EPI) 2024

Export Preparedness Index (EPI) 2024:

- The **Export Preparedness Index (EPI) 2024** was released by **NITI Aayog**. **Hence option (c) is correct.**
- EPI 2024 is the **fourth edition** of the Export Preparedness Index, first launched in **2020**.
- The Index assesses the **export readiness of Indian States and Union Territories**.
- EPI 2024 evaluates export preparedness using a framework of **four pillars**.
- The four pillars of EPI are **Export Infrastructure, Business Ecosystem, Policy and Governance, and Export Performance**.
- The EPI framework comprises **13 sub-pillars and about 70 indicators**.

- States and Union Territories are grouped into **Large States, Small States, North-Eastern States and Union Territories** for comparison.
- Based on performance, States and UTs are categorised as **Leaders, Challengers and Aspirers**.
- **Maharashtra** ranked highest among **Large States** in Export Preparedness Index 2024.
- **Uttarakhand** topped the category of **Small States** in EPI 2024.
- **Uttar Pradesh** emerged as the **top-ranked landlocked state** in EPI 2024.
- The Index emphasises the role of **sub-national governments** in achieving export-led growth.
- EPI 2024 supports initiatives such as **Districts as Export Hubs** and **Atmanirbhar Bharat**.
- The Export Preparedness Index is designed as a **policy diagnostic tool**, not merely as a measure of export volume.
- The EPI highlights gaps in **trade infrastructure, logistics, access to finance and institutional capacity** at the State level.

PYQ REFERENCE: (2016)

Q. 'Global Financial Stability Report' is prepared by the

- European Central Bank
- International Monetary Fund**
- International Bank for Reconstruction and Development
- Organization for Economic Cooperation and Development

Source:

<https://economictimes.indiatimes.com/news/economy/foreign-trade/maharashtra-leads-niti-aayogs-export-preparedness-index/articleshow/126521109.cms>

7. Urban Co-operative Banks (UCBs)

Q. With reference to the co-operatives in India, consider the following statements:

- Urban Co-operative Banks in India are regulated by the Reserve Bank of India under the Banking Regulation Act, 1949.
- Co-operative credit societies in India are regulated by the Reserve Bank of India.
- Co-operative credit societies cannot accept deposits and provide loans only to their members.
- Co-operative credit societies are not permitted to offer full-fledged banking services such as cheque issuance to the public and online fund transfers.

Which of the statements given above are correct?

- 1 and 2 only
- 2 and 3 only
- 2 and 4 only
- 1 and 4 only

Answer: (d) 1 and 4 only

Explanation:

In NEWS: RBI proposes reopening urban co-operative banks' licenses; favours large credit societies

Urban Co-operative Banks (UCBs):

- Urban Co-operative Banks in India are regulated by the **Reserve Bank of India** under the **Banking Regulation Act, 1949**. **Hence statement 1 is correct.**
- The Reserve Bank of India had put on hold the licensing of new Urban Co-operative Banks nearly two decades ago due to widespread failures of newly licensed banks.
- The RBI has proposed reopening the licensing window for Urban Co-operative Banks with a preference for large and well-managed co-operative credit societies.
- Co-operative credit societies are regulated by the **Registrar of Co-operative Societies and not by the Reserve Bank of India**. **Hence statement 2 is incorrect.**
- Co-operative credit societies **can accept deposits** and provide loans only to their members. **Hence statement 3 is incorrect.**
- Co-operative credit societies are **not permitted** to offer full-fledged banking services such as cheque issuance to the public and online fund transfers. **Hence statement 4 is correct.**
- The RBI has suggested that co-operative credit societies seeking UCB licences should have **at least ten years** of active operations.
- A minimum **Capital to Risk-Weighted Assets Ratio (CRAR) of 12%** has been proposed by the RBI as a licensing condition for new UCBs.
- The RBI has recommended that the **Net Non-Performing Assets (NNPA)** ratio of eligible co-operative societies should **not exceed 3%** at the time of granting a UCB licence.
- Most failures of Urban Co-operative Banks in recent years have been linked to governance weaknesses and management fraud, particularly in smaller UCBs.
- The **"one member, one vote"** principle in UCBs has been identified as a constraint in attracting growth capital into the sector.
- Share capital in Urban Co-operative Banks is **refundable** and linked to borrowing, which undermines its role as a permanent loss-absorbing capital.
- A small proportion of large Urban Co-operative Banks account for the majority of deposits in the UCB sector.
- Amendments to the Banking Regulation Act, 1949 have been made to strengthen RBI's supervisory powers over UCBs.
- Despite improvements in provisioning and net NPAs, asset quality concerns continue to persist in parts of the UCB sector.

PYQ REFERENCE: (2021)

Q. With reference to 'Urban cooperative Bank' in India, consider the following statement:

- They are supervised and regulated by local boards set up by the state Governments.
- They can issue equity shares and preference shares.
- They were brought under the purview of the Banking Regulation act, 1949 through an amendment in 1966

Which of the statements given above is/are correct?

- 1 only
- 2 and 3 only**
- 1 and 3 only
- 1, 2 and 3

Source: <https://indianexpress.com/article/business/rbi-reopening-urban-co-operative-banks-licenses-large-credit-societies-10471845/>

8. Economic Survey 2026 – Consumption Growth in India

Q. According to the Economic Survey 2026, Which of the following factors were the drivers of private consumption growth in India?

1. Low inflation
2. Stable employment conditions
3. Improved agricultural performance
4. Tax reforms and rationalisation

Select the correct answer using the code below:

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

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

Explanation:

In NEWS: Economic Survey 2026: Consumption growth to slow down 'slightly' despite rise in domestic demand

Economic Survey 2026: Consumption Growth in India

- India's growth is **strongly driven by private spending** rather than investment or exports.
- **Rural and urban households at the lower end of income distribution** are seeing improved consumption.
- The slight slowdown is **temporary**, with consumption expected to remain **resilient** due to supportive macroeconomic conditions.

Consumption Share & Growth

- In FY 2025-26, **private final consumption expenditure (PFCE)** accounted for **61.5% of GDP**, the highest since FY 2011-12.
- PFCE growth is estimated at **7.0% for FY 2025-26** (first advance estimate), slightly lower than **7.2% in FY 2024-25**.
- The Indian economy is currently in its **most consumption-driven phase since 2012**.
- **Domestic demand** remains a strong driver of economic growth in FY 2026.

Drivers of Consumption

- **Low inflation, stable employment**, and **higher real incomes** are supporting consumption.
- **Improved agricultural performance** has increased rural spending.
- **Tax reforms and rationalisation** have improved urban consumption.

Hence all are correct.

Half-Yearly Trends

- PFCE growth was **7.3% in H1 FY 2025-26** and increased to **7.5% in H1 FY 2026-27**.
- **Second-half projections** indicate a **slight moderation** in consumption growth.

Inequality and Inclusion

- **Consumption-based inequality has declined** according to the Household Consumption Expenditure Survey 2023-24.
- The **bottom 5-10% of the population** in rural and urban areas saw the **highest increase in per capita monthly consumption** between 2022-23 and 2023-24.

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://www.downtoearth.org.in/economy/economic-survey-2026-consumption-growth-to-slow-down-slightly-despite-rise-in-domestic-demand>

9. Designs Act

Q. Consider the following statements about the Designs Act, 2000:

- I. The Act was introduced to comply with the TRIPS Agreement.
- II. It governs both industrial designs and trademarks.
- III. Functional features of a product can be registered under the Act.
- IV. The initial term of protection for a registered design is 10 years.

Which of the statements given above are correct?

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

Answer: (a) I and IV only

Explanation:

In NEWS: Department for Promotion of Industry and Internal Trade Proposes Amendments to Designs Act to Align with Global Best Practices

Designs Act:

- The Designs Act, 2000 is the primary legislation in India governing the **protection of industrial designs**, having repealed the earlier 1911 Act to align with international standards like the TRIPS Agreement. **Hence statement I is correct and statement II is incorrect.**
- Managed by the **Ministry of Commerce and Industry**, it protects the aesthetic "look and feel" of a product, such as its shape, configuration, or pattern rather than its functional utility.
- Functional features cannot be registered; only aesthetic features are protected. **Hence statement III is incorrect.**

Core Provisions and Concepts

- **Definition of "Design":** Under Section 2(d), design refers to features of shape, configuration, or ornament applied to an article by any industrial process that appeal solely to the eye.
- **Absolute Novelty:** A design must be new or original and not previously published anywhere in the world to qualify for registration.
- **Exclusions:** Registration is prohibited for designs that lack novelty, contain scandalous or obscene matter, or are purely functional.
- **Locarno Classification:** The Act uses this international classification system to categorize goods based on their subject matter rather than the material used.

Registration and Duration

- Application:** Filed at the Patent Office (headquartered in Kolkata) by the creator or proprietor.
- Protection Period:** Initial protection lasts for 10 years, extendable for an additional 5 years (total 15 years) upon payment of renewal fees. **Hence statement IV is correct.**
- Restoration:** Lapsed designs can be restored within one year if the failure to pay fees was unintentional.

Infringement and Remedies

Infringement (often called piracy) occurs when a third party applies a registered design or a "fraudulent or obvious imitation" to a product without consent.

- **Civil Remedies:** Proprietors can seek injunctions to stop the imitation and claim damages.
- **Statutory Penalty:** A registered owner can recover up to ₹25,000 for each contravention, with a total cap of ₹50,000 per design as a contract debt.
- **Judicial Jurisdiction:** Cases must be filed in a District Court or higher; if the design's validity is challenged, the case is transferred to the High Court.

PYQ REFERENCE: (2017)

Q. With reference to the 'National Intellectual Property Rights Policy', consider the following statements:

- It reiterates India's commitment to the Doha Development Agenda and the TRIPS Agreement.
- Department of Industrial Policy and Promotion is the nodal agency for regulating intellectual property rights in India.

Which of the above statements 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=2219951®=3&lang=1>

10. "Zero defect - Zero effect"

Q. Consider the following statements with respect to Zero Defect Zero Effect (ZED):

- The scheme enables MSMEs towards achievement of high quality and high productivity with the least effect on the environment.
- Under the scheme, Certification can be attained in five Levels after registering and taking the ZED Pledge.
- The Ministry of MSME reserves the right to visit & inspect any MSME after Certification, which has availed any subsidy, benefit or incentives under this Scheme.

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: (c) I and III only

Explanation:

In NEWS: Made-in-India products should offer top quality, says PM

Zero Defect Zero Effect (ZED):

- Zero Defect Zero Effect (ZED) is an Indian government initiative launched to enhance the quality and environmental sustainability of MSME manufacturing.
- It aims to eliminate defects (zero defect) and minimize negative ecological impact (zero effect), thereby boosting competitiveness and reducing wastage.
- MSME Sustainable (ZED) Certification can be attained in THREE Levels after registering and taking the ZED Pledge:
 - Certification Level 1: BRONZE
 - Certification Level 2: SILVER
 - Certification Level 3: GOLD **Hence statement II is incorrect.**
- Up to 75% financial support on certification costs, with specific benefits for women-led MSMEs and those in specific regions is provided.
- The Ministry of MSME reserves the right to visit & inspect any MSME after Certification, which has availed any subsidy, benefit or incentives under this Scheme. **Hence statement III is correct.**

The ZED Certification envisages promotion of Zero Defect Zero Effect (ZED) practices amongst MSMEs so as to:

- Encourage and enable MSMEs for manufacturing of quality products using latest technology, tools & to constantly upgrade their processes for achievement of high quality and high productivity with the least effect on the environment. **Hence statement I is correct.**
- Develop an Ecosystem for ZED Manufacturing in MSMEs, for enhancing competitiveness and enabling exports
- Promote adoption of ZED practices and recognising the efforts of successful MSMEs
- Encourage MSMEs to achieve higher ZED Certification levels through graded incentives
- Increase public awareness on demanding Zero Defect and Zero Effect products through the MSME Sustainable (ZED) Certification
- Identify areas to improve upon, thereby assisting the Government in policy decisions and investment prioritization

Source: <https://www.thehindu.com/news/national/pm-modi-130th-mann-ki-baat-on-january-25-2026/article70549004.ece>
<https://zed.msme.gov.in/introduction>

11. Chips to Start-up (C2S) Programme

Q. With reference to the Chips to Start-up (C2S) Programme, consider the following statements:

- It is an initiative of the Ministry of Skill Development and Entrepreneurship to build indigenous semiconductor chip design capability.
- It also aims to promote start-up incubation, patents, and technology transfer in semiconductor design.

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: Chips to Start-up (C2S) Programme - Fostering India's Indigenous Chip Design Ecosystem

Chips to Start-up (C2S) Programme:

• Chips to Start-up (C2S) Programme is an **umbrella capacity-building initiative** launched by the **Ministry of Electronics and Information Technology (MeitY)** in 2022. **Hence statement 1 is incorrect.**

• The programme aims to strengthen **India's indigenous semiconductor chip design ecosystem.**

• It has a total outlay of **₹250 crore over five years.**

• C2S targets the creation of **85,000 industry-ready professionals** across B.Tech, M.Tech and PhD levels.

• The programme covers **300+ academic institutions** and enables nationwide participation in chip design.

• **ChipIN Centre at C-DAC Bengaluru** acts as a national hub providing shared access to advanced **EDA tools** and design infrastructure.

• **Semi-Conductor Laboratory (SCL), Mohali** supports fabrication of student-designed chips through **shared wafer runs.**

• The programme enables hands-on experience in **ASIC, SoC and IP core design**, fabrication, and testing.

• C2S also aims to promote **start-up incubation, patents, and technology transfer** in semiconductor design. **Hence statement 2 is correct.**

• The programme contributes to India's goals of **technological self-reliance and global competitiveness** in semiconductors.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2215755®=3&lang=1>

12. SWAMIH Fund

Q. With reference to the eligibility criteria for projects under the SWAMIH Fund, consider the following statements:

1. The project must be registered with the Real Estate Regulatory Authority (RERA).
2. Only completed but unsold housing projects are eligible for funding.
3. The project must be stalled or at risk of stalling due to shortage of funds.
4. The value of receivables and unsold inventory must exceed the remaining construction and debt costs.

Which of the statements given above are correct?

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

Answer: (a) 1, 3 and 4 only

Explanation:

In NEWS: SWAMIH Fund has protected homebuyers' interests, revived the housing sector, generated employment, and strengthened overall economy

The SWAMIH Investment Fund:

• The SWAMIH Investment Fund (Special Window for Affordable and Mid-Income Housing) is a government-backed social impact fund launched in November 2019 to provide last-mile financing for stalled residential projects in India.

• **Purpose:** Acts as a "lender of last resort" to complete stressed, brownfield, and RERA-registered housing projects that are "net-worth positive" (value of unsold inventory exceeds completion costs).

• **Management:** Managed by SBI Ventures Limited, a subsidiary of the State Bank of India (SBI).

• **Sponsor:** The Secretary, Department of Economic Affairs, Ministry of Finance, on behalf of the Government of India.

Eligibility Criteria for Projects

• **RERA Registered:** Must be registered with the Real Estate Regulatory Authority.

• **Stalled/Stressed:** Must be stalled or likely to stall due to lack of funds.

• **Net-Worth Positive:** Receivables + unsold inventory value must be greater than remaining construction and debt costs.

• **Category:** Affordable or Mid-Income housing (units ≤ 200 sq. m. RERA carpet area).

• **Pricing Limits:**

• Mumbai (MMR): < ₹2 crore.

• Major Metros (NCR, Pune, etc.): < ₹1.5 crore.

• Rest of India: < ₹1 crore.

Hence only 1,3 and 4 are correct.

PYQ REFERENCE: (2017)

Q. With reference to 'National Investment and Infrastructure Fund', which of the following statements is/are correct?

1. It is an organ of NITI Aayog.
2. It has a corpus of Rs. 4, 00,000 crore at present.

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://www.pib.gov.in/PressReleasePage.aspx?PRID=2212593®=3&lang=1>

13. MAHSR project

Q. The MAHSR project, recently seen in the news, is related to:

- (a) Construction of India's first high-speed rail corridor
- (b) Establishment of India's first metro rail system
- (c) Development of a new inland waterway corridor
- (d) Introduction of India's first semi-high-speed express train

Answer: (a) Construction of India's first high-speed rail corridor

Explanation:

In NEWS: First mountain tunnel breakthrough achieved in bullet train project: Minister

Mumbai-Ahmedabad High Speed Rail (MAHSR) project:

- The **first mountain tunnel breakthrough** of the Mumbai-Ahmedabad High-Speed Rail project was achieved in **Palghar district, Maharashtra. Hence option (a) is correct.**
- The tunnel, MT-5, is **1.5 km long** and the **longest among the seven planned mountain tunnels in Maharashtra** for the bullet train corridor.
- The **MT-5 tunnel lies between Virar and Boisar stations.**
- Excavation of the tunnel was done **from both ends** using the **drill and blast method** and completed in **18 months.**
- The **Mumbai-Ahmedabad High-Speed Rail corridor** has an **overall length of 508 km.**
- The project includes **8 mountain tunnels**, of which **7 are in Maharashtra (total ~6.05 km)** and **1 in Gujarat (350 m).**
- The **total tunnel length** in the corridor is **27.4 km**, with **21 km underground tunnels** and **6.4 km surface tunnels.**
- Once completed, the bullet train will reduce **travel time between Mumbai and Ahmedabad to 1 hour 58 minutes.**
- India is likely to get its **first bullet train by 15 August 2027.**
- The project is expected to **generate employment** and **integrate the economies of major commercial centres** along the corridor.

PYQ REFERENCE: [2016]

Q. 'Project Loon', sometimes seen in the news, is related to

- waste management technology
- wireless communication technology**
- solar power production technology
- water conservation technology

Source: <https://indianexpress.com/article/business/bullet-train-project-achieves-breakthrough-of-first-mountain-tunnel-in-maharashtras-palghar-10451892/>

14. Coal power generation in India

Q. Consider the following statements with respect to coal power generation in India:

- India's coal-fired power generation fell by nearly 3% in 2025.
- The 3% decline marks the first annual decline in the last 50 years.
- Growth in non-fossil electricity made up 44% of the drop in coal and gas generation 2025.

Which of the statements given above are correct?

- I and II only
- II and III only
- I and III only
- I, II and III

Answer: (c) I and III only

Explanation:

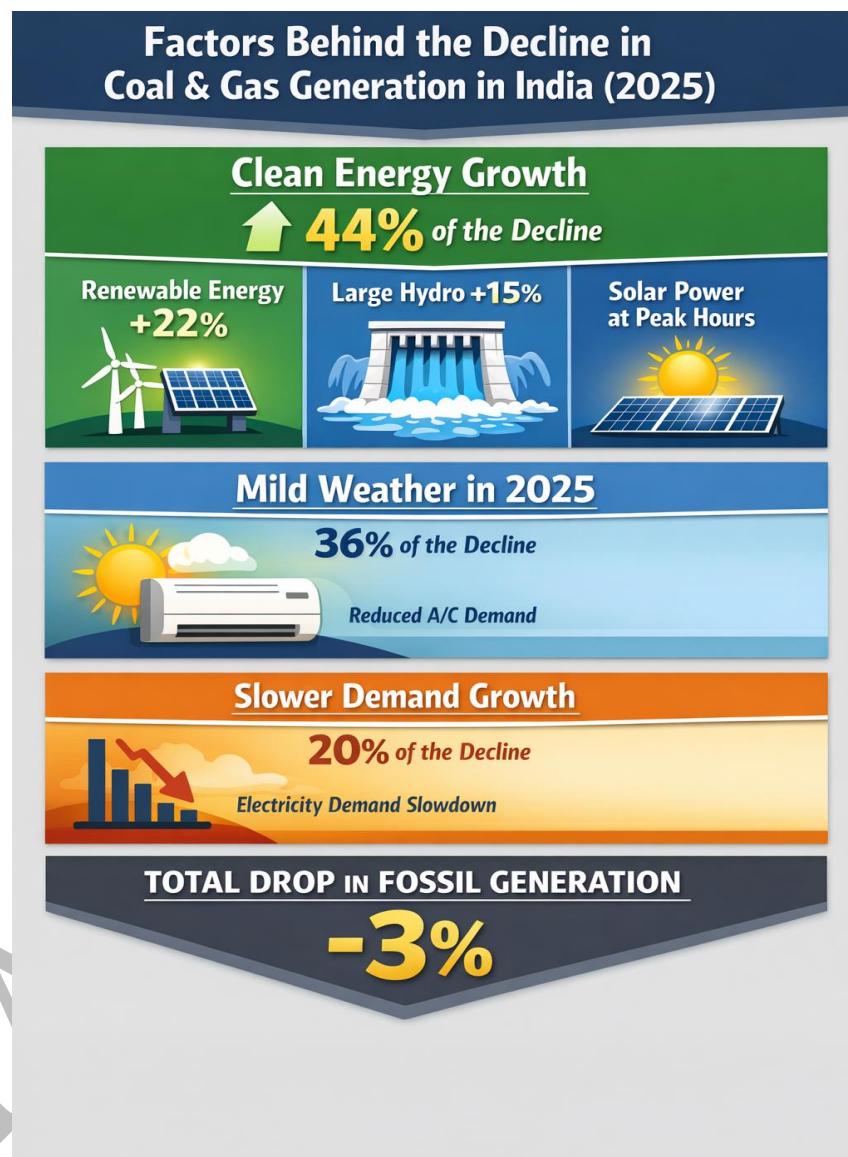
In NEWS: India's coal power generation falls 3% in 2025 as clean energy growth reshapes electricity mix: CREA

Coal Generation Declines in 2025:

- India's coal-fired power generation fell by nearly 3% in 2025, marking only the second annual decline in the last ~50 years. **Hence statement I is correct and statement II is incorrect.**

- The only other drop happened during Covid-19 demand collapse.
- Unlike the pandemic, this drop was not due to an economic shock, it reflects structural changes in India's electricity system.

Reason for decline:



Hence statement III is correct.

Shift in Policy Priorities

CREA argues that adding new coal plants is no longer justified and that policymakers should focus on:

- Making the grid more flexible
- Scaling battery storage
- Strengthening transmission networks
- Lowering minimum technical loads for coal plants

India's NDC (Nationally Determined Contribution) under the Paris Agreement

- **Emission Intensity:** Reduce emissions intensity of GDP by 45% by 2030 (from 2005 levels).
- **Energy Mix:** Achieve 50% cumulative electric power installed capacity from non-fossil fuel sources by 2030, and 500 GW non-fossil capacity.
- **Carbon Sinks:** Create an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent through afforestation by 2030.
- **Net-Zero:** Reach net-zero emissions by 2070.
- **Adaptation:** Strengthen resilience in sectors like agriculture, water, health, and disaster management.

Broader Indian Power Sector Trends

- India's installed renewable capacity has been growing rapidly, especially solar, for example, about 18 GW of solar was added in the first half of 2025.
- Fuel mix shifts have seen renewables and hydropower rising, while coal's share has been gradually declining.
- Other reports (like from the IEA) also project a rare decline in coal power usage in 2025, influenced by strong monsoon and hydropower output though coal capacity continues to expand.

PYQ REFERENCE: (2020)

Q. Consider the following statements:

1. Coal ash contains arsenic, lead and mercury.
2. Coal-fired power plants release sulphur dioxide and oxides of nitrogen into the environment.
3. High ash content is observed in Indian coal.

Which of the statements given above is/are correct?

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

Source: <https://www.downtoearth.org.in/energy/indias-coal-power-generation-falls-3-in-2025-as-clean-energy-growth-reshapes-electricity-mix-crea>

15. Critical & Strategic Minerals

Q. Consider the following statements:

Statement-I: Coking coal is a Critical and Strategic Mineral in India.

Statement-II: Coking coal is notified under Part D of the Mines and Minerals (Development and Regulation) Act, 1957.

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: (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I

Explanation:

In NEWS: Government Notifies Coking Coal as Critical & Strategic Mineral under MMDR Act, 1957

Recent Amendment:

- Under the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act), 1957, Section 11C empowers the Central Government to notify critical and strategic minerals; accordingly, the First Schedule has been amended by updating Part A to read "Coal, including Coking Coal" and by including "Coking Coal" in Part D as a Critical and Strategic Mineral. **Hence both Statement-I and Statement-II are correct and Statement-II explains Statement-I**

Coking coal:

- Coking coal, also known as metallurgical coal, is a **specific grade of bituminous coal essential for the production of steel**.
- Unlike thermal coal used for power generation, coking coal has unique properties that allow it to soften and liquefy when heated in an oxygen-free environment, eventually resolidifying into a hard, porous substance called coke.
- **China is the world's largest producer** (62%), followed by Australia (15%), Russia (9%), and the USA (5%).

Coking coal in India:

- **India currently imports nearly 95% of its high-grade coking coal requirements** for steelmaking, creating a massive foreign exchange outgo.
- India has 37.37 billion tonnes of coking coal resources.
- **Major reserves:** Jharkhand, Madhya Pradesh, West Bengal, Chhattisgarh.

Key Applications of Coking Coal:

- **Steel Production (Primary Use):** Approx. 70% of global steel is produced via the Blast Furnace-Basic Oxygen Furnace (BF-BOF) route, relying on coke for chemical reduction of iron ore.
- **Foundry Coke:** Used in smaller furnaces to melt iron and steel scrap for casting.
- **Pulverized Coal Injection (PCI):** High-grade metallurgical coal can be injected directly into blast furnaces to reduce the overall coke requirement.
- **By-product Utilization:** The coking process produces coal tar and coke oven gas, which are used to manufacture chemicals, plastics (e.g., Bakelite), and, in some cases, as a source for medicinal products.

PYQ REFERENCE: (2015)

Q. In India, the steel production industry requires the import of

- (a) Saltpetre
(b) Rock phosphate
(c) Coking coal
(d) All of the above

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2219947®=3&lang=1>

INTERNATIONAL RELATIONS

1. Line of Actual Control (LAC)

Q. Consider the following statements regarding the Line of Actual Control (LAC):

1. The Line of Actual Control is a line separating Indian-controlled territory from Chinese-controlled territory.
2. The Line of Actual Control was formally defined and mutually accepted by India and China in the 1993 agreement.
3. The term "Line of Actual Control" was first formulated by Jawaharlal Nehru in 1959.
4. In the Eastern Sector, the Line of Actual Control broadly follows the McMahon Line.

Which of the statements given above are correct?

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

Answer: (a) 1 and 4 only

Explanation:

In NEWS:

Line of Actual Control (LAC):

- The Line of Actual Control (LAC) is a **notional demarcation line** separating Indian-controlled territory from Chinese-controlled territory along the India–China border. **Hence statement 1 is correct.**
- It is **not a legally recognised or formally demarcated international boundary.** **Hence statement 2 is incorrect.**
- The term *Line of Actual Control* was first used by **Chinese Premier Zhou Enlai in 1959** in a letter to **Indian Prime Minister Jawaharlal Nehru**, referring to the line up to which each side exercised actual control. India did **not accept this formulation at that time.** **Hence statement 3 is incorrect.**
- The modern usage of the LAC emerged after the **1962 Sino-Indian War**, referring to the positions held by both sides when active hostilities ended, making it a **de facto ceasefire line.**
- The LAC represents **actual military control on the ground**, which differs from the officially claimed boundaries of both countries. India claims Aksai Chin, while China claims Arunachal Pradesh, but these claims are **separate from the LAC concept.**
- The LAC is conventionally divided into **three sectors:**
 - **Western Sector:** Ladakh–Xinjiang/Tibet region
 - **Middle Sector:** Uttarakhand and Himachal Pradesh–Tibet region
 - **Eastern Sector:** Arunachal Pradesh–Tibet region
- In the **Eastern Sector**, the LAC broadly follows the **McMahon Line**, though China disputes its legal validity. **Hence statement 4 is correct.**
- India and China signed the **1993 Agreement on the Maintenance of Peace and Tranquility along the LAC**, followed by the **1996 agreement**, to prevent escalation and manage border tensions while acknowledging that the LAC is not the final boundary.
- The LAC has **never been jointly demarcated on maps or on the ground** across its entire length. The absence of mutually agreed maps has resulted in **differing perceptions**, which are a major cause of border incidents and military standoffs.



PYQ REFERENCE: (2014)

Q. The Radcliffe Committee was appointed to

- (a) solve the problem of minorities in India
- (b) give effect to the Independence Bill
- (c) delimit the boundaries between India and Pakistan**
- (d) enquire into the riots in East Bengal

Source: https://indianexpress.com/article/explained/china-lac-arunachal-pradesh-claims-history-border-expert-10458694/?ref=explained_pg

2. Ganges Water Sharing Treaty

Q. With reference to the Ganges Water Sharing Treaty, consider the following statements:

1. It was signed between India and Bangladesh in 1996 to resolve a dispute arising after India built the Farakka Barrage in West Bengal.
2. The treaty established a fifty year water-sharing arrangement and recognised Bangladesh's rights as a lower-level riparian.

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:

Ganges Water Sharing Treaty:

Background

- The treaty was signed on **12 December 1996** between **India and Bangladesh.**
- It resolved disputes arising after India built the **Farakka Barrage** in West Bengal in the 1970s, which affected water flow to Bangladesh. **Hence statement 1 is correct.**
 - The Farakka Barrage is a dam on the **Bhagirathi River** located in the Indian state of West Bengal, roughly 10 km (6.2 mi) from the border with Bangladesh.
 - India uses it to control the flow of the Ganges River.
 - The dam was built to divert Ganges River water into the Hooghly River during the dry season, from January to June, to flush out the accumulating silt which in the 1950s and 1960s was a problem at Kolkata Port on the Hooghly River.
- The treaty established a **30-year water-sharing arrangement** and recognised Bangladesh's rights as a lower-level riparian. **Hence statement 2 is incorrect.**
- This treaty is the **only long-term comprehensive water-sharing agreement** between India and Bangladesh among the 54 rivers they share.

Purpose

- To ensure **equitable distribution of Ganges waters** during the **dry season (January 1 – May 31).**
- To prevent disputes over water scarcity for **agriculture, fisheries, navigation, and domestic use.**

- To institutionalize **cooperation and data-sharing** between the two countries.

Key Provisions

1. Water Allocation

- Flow sharing is measured at the **Farakka Barrage (India)** and **Hardinge Bridge (Bangladesh)**.
- Allocation is based on **10-day flow periods**.
- Both countries are guaranteed **minimum flows** even during low water levels.

2. Joint Mechanism

- The **Joint Rivers Commission (JRC)** monitors implementation.
- Both countries carry out **joint water measurements** and **data exchange**.

3. Duration

- Initial validity: **30 years** (1997–2026).
- Can be **renewed by mutual consent** before expiry.

PYQ REFERENCE:

Q. Mekong Ganga Co-operation Project is : [2001]

- (a) an irrigation project involving India and Myanmar
- (b) a joint tourism initiative of some Asian countries**
- (c) a hydroelectric power project involving India, Bangladesh and Myanmar
- (d) a defence and security agreement of India with its eastern neighbours

Source: <https://www.deccanchronicle.com/nation/world/india-bangladesh-begin-joint-water-measurements-as-ganges-treaty-enters-final-year-1927675>

3. India-EU Free Trade Agreement (FTA)

Q. With reference to the India-EU Free Trade Agreement (FTA), consider the following statements:

1. The EU will eliminate tariffs on more than 99% of Indian exports by trade value.
2. India has provided full market access to its dairy and sensitive agricultural sectors under the agreement.
3. Under the EU's Carbon Border Adjustment Mechanism (CBAM), India has secured Most-Favoured Nation (MFN)-based flexibilities.

Which of the statements given above are correct?

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

Answer: (a) 1 and 3 only

Explanation:

In NEWS: 'India-EU Free Trade Agreement Concluded: A Strategic Breakthrough in India's Global Trade Engagement. Mother of all deals': India and the EU finalise FTA

India-EU Free Trade Agreement (FTA):

- The India-EU Free Trade Agreement was concluded in **January 2026**.

- Negotiations for the India-EU FTA were originally launched in **2007** and re-launched in **2022**.
- The agreement was announced at the **16th India-EU Summit**.
- India and the European Union are the **4th and 2nd largest economies** respectively.
- Together, India and the EU account for **about 25% of global GDP** and **nearly one-third of global trade**.
- The European Union consists of **27 member countries**.
- The India-EU FTA is **India's largest and most comprehensive FTA** to date.
- The EU becomes **India's 22nd FTA partner**.

Trade & Market Access

- The EU will eliminate tariffs on **over 99% (~99.5%) of Indian exports by trade value**. **Hence statement 1 is correct.**
- More than **90% of Indian exports** will become **duty-free from the date of entry into force** of the FTA.
- India has offered tariff elimination or reduction on **about 97.5% of EU exports by trade value**.
- Tariff elimination for certain products will be **phased over 3, 5, 7 or 10 years**.
- Labour-intensive exports worth about **USD 33 billion** will benefit from zero-duty access.
- Key beneficiary sectors include **textiles, apparel, leather, footwear, marine products, gems and jewellery, handicrafts and engineering goods**.

Agriculture & Sensitive Sectors

- India has **excluded dairy** from tariff liberalisation under the FTA.
- Sensitive agricultural products such as **cereals, poultry, soymeal and certain fruits and vegetables** are safeguarded by India. These sectors have **not** been granted full market access. **Hence statement 2 is incorrect.**
- The FTA provides **enhanced market access** for Indian **tea, coffee, spices, processed foods, fruits and vegetables**.
- The EU has retained protection for its sensitive sectors such as **beef, sugar, rice, milk powder and honey**.

Services Trade & Mobility

- The EU has provided market access commitments in **144 services sub-sectors**.
- India has offered market access in **102 services sub-sectors**.
- Key services covered include **IT/ITeS, professional services, education, financial services, tourism and construction**.
- The FTA includes a **structured mobility framework** for professionals.
- Mobility provisions cover **Intra-Corporate Transferees (ICTs)**.
- Mobility provisions also cover **Contractual Service Suppliers (CSS)** and **Independent Professionals (IP)**.
- The FTA provides **entry and working rights for dependents** of certain categories of professionals.
- Provisions also support **student mobility and post-study work opportunities**.

Automobiles & Manufacturing

- The FTA includes a **calibrated and quota-based liberalisation** for automobiles.
- European cars above a certain price threshold will be allowed at **lower customs duties**, subject to quotas.
- The agreement promotes **Make in India** by enabling future manufacturing and export opportunities from India.

- Indian consumers are expected to benefit from **greater competition and access to high-technology products**.

CBAM & Sustainability

- The FTA includes **specific provisions related to the EU's Carbon Border Adjustment Mechanism (CBAM)**.
- India has secured **Most-Favoured Nation (MFN)-based flexibilities** under CBAM. **Hence statement 3 is correct.**
- The agreement provides for **recognition of Indian carbon verifiers**.
- It includes **technical and financial cooperation** to help Indian exporters comply with carbon regulations.

Intellectual Property & Emerging Areas

- The FTA reaffirms commitments under the **TRIPS Agreement**.
- It recognises the importance of India's **Traditional Knowledge Digital Library (TKDL)**.
- Cooperation is envisaged in **Artificial Intelligence, clean technologies and semiconductors**.
- The agreement includes provisions on **digital trade and MSMEs**.

Strategic Significance

- The India-EU FTA reduces India's dependence on **any single export market**.
- It strengthens **rules-based, predictable and transparent trade**.
- Along with FTAs with the **UK and EFTA**, the agreement opens up the **entire European market** for India.
- The FTA supports India's long-term vision of **Viksit Bharat 2047**.

PYQ REFERENCE: (2017)

Q. 'Broad-based Trade and Investment Agreement (BTIA)' is sometimes seen in the news in the context of negotiations held between India and

- European Union
- Gulf Cooperation Council
- Organization for Economic Cooperation and Development
- Shanghai Cooperation Organization

Source: <https://www.thehindu.com/business/Economy/india-and-eu-conclude-talks-on-mother-of-all-deals-ending-negotiations-that-started-in-2007/article70556539.ece>
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2219065®=3&lang=1>

4. India-Canada Energy Cooperation

Q. With reference to India-Canada energy cooperation, consider the following statements:

- India and Canada launched the renewed Ministerial Energy Dialogue during India Energy Week 2026 in Goa.
- India is the world's third-largest consumer of both oil and LPG
- India is an active participant, while Canada is an observer in the Global Biofuels Alliance (GBA).

Which of the statements given above are correct?

- I and II only
- II and III only
- I and III only
- I, II and III

Answer: (d) I, II and III

Explanation:

In NEWS: India Energy Week 2026

India-Canada Energy Cooperation & Global Biofuels Alliance (GBA)

- India and Canada launched the **renewed India-Canada Ministerial Energy Dialogue** during **India Energy Week 2026** in Goa. **Hence statement I is correct.**
- This was the **first high-level participation of a Canadian Cabinet Minister at India Energy Week**.
- The dialogue follows directions given by **India and Canada Prime Ministers at G7 2025 in Kananaskis, Canada**.
- Canada is aiming to become an **energy superpower in clean and conventional energy**, with **export diversification as a priority**.
- India is the **world's**
 - **third-largest oil consumer,**
 - **fourth-largest LNG importer,**
 - **third-largest LPG consumer,** and
 - **fourth-largest refining capacity globally.** **Hence statement II is correct.**
- India is projected to account for **over one-third of global energy demand growth over the next two decades**.
- Both countries agreed to **deepen bilateral energy trade**, including:
 - **Canadian LNG, LPG, and crude oil to India**
 - **Refined petroleum products from India to Canada**

Climate, Clean Energy & Technologies

- Both nations committed to **reducing emissions in conventional energy value chains** via **carbon capture, utilization, and storage (CCUS)**.
- Cooperation will include **renewable energy, hydrogen, biofuels, and sustainable aviation fuel**.
- Other focus areas: **battery storage, critical minerals, electricity systems, clean technologies, AI in energy sector, and energy supply chain resilience**.

Global Biofuels Alliance (GBA)

- India and Canada collaborate on the **Global Biofuels Alliance (GBA)** to advance biofuels globally.
- Canada is currently an **observer in the GBA**, while India is actively involved. **Hence statement III is correct.**
- GBA aims to **promote the global development and deployment of biofuels**, supporting climate objectives.

Strategic Significance

- The partnership enhances **energy security and diversification of supply chains**.
- India acts as a **major consumer and growth driver**, while Canada is a **secure and reliable supplier**.
- Bilateral cooperation also supports **climate objectives and sustainable energy transition globally**.

PYQ REFERENCE: (2017)

Q. With reference to 'Global Climate Change Alliance', which of the following statements is/are correct?

1. It is an initiative of the European Union.
2. It provides technical and financial support to targeted developing countries to integrate climate change into their development policies and budgets.
3. It is coordinated by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2219328®=3&lang=1>

5. Board of Peace

Q. The Board of Peace initiative, recently seen in the news, was proposed by

- (a) United States
(b) United Kingdom
(c) United Nations
(d) European Union

Answer: (a) United States

Explanation:

In NEWS: India gets invite to Trump's Board of Peace — and to deal with many tricky questions

Board of Peace:

- The *Board of Peace* is a new international peace initiative announced by the U.S. President Donald Trump in 2026. **Hence option (a) is correct.**
- Its primary aim is to address the **Gaza conflict** and facilitate **post-war transition, governance, and reconstruction** in the region.
- The initiative is separate from the **UN Security Council** framework but is claimed to complement global peace efforts.
- India was formally invited by the **United States** to join the *Board of Peace*.
- The invitation is part of a broader outreach to around **60 countries** across Asia, Europe, Africa, and the Middle East.
- India has historically supported a **two-state solution** for Israel-Palestine and emphasised **multilateralism through the UN**.
- Joining the Board could pose **diplomatic and geopolitical challenges**, including balancing relations with Arab countries and other partners.
- The U.S. invitation aims to include countries capable of **strategic decision-making and peacebuilding in Gaza**.
- India has **not yet officially accepted or declined** the invitation and is reportedly **weighing options carefully**.
- Participation in the Board could influence India's **foreign policy perception** in multilateral and regional forums.

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 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://indianexpress.com/article/explained/explained-global/india-invite-board-of-peace-tricky-questions-trump-10481712/>

6. Indo-Pacific Oceans Initiative

Q. Consider the following countries:

1. Australia
2. Japan
3. France
4. Indonesia

How many of the above countries are the partners of the Indo-Pacific Oceans Initiative?

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

Answer: (d) All four

Explanation:

In NEWS: India welcomes Spain joining Indo-Pacific Oceans Initiative

Indo-Pacific Oceans Initiative (IPOI):

- The **Indo-Pacific Oceans Initiative (IPOI)** was **launched by India in 2019**.
- It was announced at the **East Asia Summit (EAS)**.
- IPOI builds upon India's **SAGAR vision** (*Security and Growth for All in the Region*).
- It seeks to promote a **free, open, inclusive, and rules-based Indo-Pacific**.
- The initiative is **non-military in nature** and focuses on **cooperative, practical outcomes**.

Core Pillars of IPOI

IPOI is structured around **seven thematic pillars:**

1. **Maritime Security**
2. **Maritime Ecology**
3. **Maritime Resources**
4. **Capacity Building & Resource Sharing**
5. **Disaster Risk Reduction**
6. **Science, Technology & Academic Cooperation**
7. **Trade, Connectivity & Maritime Transport**

- Each pillar is **voluntary** and can be led by **different partner countries**.

- Countries like **Australia, Japan, France, Indonesia**, and others have partnered with India under different pillars. **Hence all are correct.**

Significance

- Strengthens **maritime cooperation** in the Indo-Pacific.
- Enhances **blue economy** and **marine sustainability**.
- Reinforces **ASEAN centrality** in the regional architecture.

PYQ REFERENCE: (2018)

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.newsonair.gov.in/india-welcomes-spain-joining-indo-pacific-oceans-initiative/>

7. World Economic Forum

Q. Consider the following statements:

1. The World Economic Forum (WEF) is an international non-governmental organization founded in 1971 by Klaus Schwab.
2. WEF publishes reports such as the Global Risks Report and Global Gender Gap Report.

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: World Economic Forum has become Western Geopolitical Forum. And China is filling the gap

Recent issues with background:

- **World Economic Forum (WEF)** is an annual international meeting, often held at Davos, Switzerland, bringing together political, business, and civil society leaders.
- The WEF is increasingly dominated by Western geopolitical priorities, with discussions heavily focused on US-EU tensions, trade disputes, and conflicts like Ukraine.
- Many Global South countries find Davos discussions less relevant to their development and economic challenges.
- China hosts alternative forums such as:

- **Boao Forum for Asia** – Asia-focused economic dialogue
- Annual Meeting of the New Champions – sometimes called “**Asian Davos**,” emphasizing business and innovation
- These China-led forums focus on **South-South cooperation**, trade, infrastructure, and development, providing a counterweight to WEF’s Western tilt.
- The WEF’s global economic relevance is perceived to be declining in some regions because it is viewed as a proxy for Western geopolitical interests.
- This shift indicates the emerging multipolar world order, where non-Western powers are creating forums reflecting their priorities and those of developing countries.

World Economic Forum (WEF):

- **Founded in 1971** by **Klaus Schwab** in Switzerland.
- **Headquarters:** Cologny, Switzerland.
- **Type:** International non-governmental organization (NGO). **Hence statement 1 is correct.**
- **Purpose:** Improve the state of the world through **public-private cooperation**.
- **Annual Meeting:** Held at **Davos**, Switzerland; discusses global economic, political, social, and technological issues.
- **Regional Meetings:** Africa, Asia, Latin America, etc.
- **Reports Published:**
 - Global Competitiveness Report
 - Global Risks Report
 - Global Gender Gap Report. **Hence statement 2 is correct.**
 - Future of Jobs Report
 - Global Cybersecurity Outlook
 - Top 10 Emerging Technologies
 - Chief Economists’ Outlook
 - Annual Report
 - Global Cooperation Barometer
 - Travel & Tourism Development Index
 - Fostering Effective Energy Transition Report
 - New Nature Economy Reports
- **Membership:** Corporates and institutions; participation requires **paid membership**.

PYQ REFERENCE:

Q. The Global Competitiveness Report is published by the (2019)

- (a) International Monetary Fund
(b) United Nations Conference on Trade and Development
(c) World Economic Forum
(d) World Bank

Which of the following gives 'Global Gender Gap Index' ranking to the countries of the world? (2017)

- (a) World Economic Forum**
(b) UN Human Rights Council
(c) UN Women
(d) World Health Organisation

Source:

<https://indianexpress.com/article/opinion/columns/world-economic-forum-has-become-western-geopolitical-forum-and-china-is-filling-the-gap-10491516/>

8. Kurds

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

1. The Kurds are an Iranic ethnic group native to the Middle East.
2. They have an internationally recognised sovereign state called Kurdistan.
3. Kurdish languages belong to the Iranian branch of the Indo-European language family.

Which of the statements given above are correct?

- (a) 1 and 2 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: Syria announces a new four-day ceasefire with Kurdish-led forces

Who are the Kurds?

- The **Kurds** are an **Iranic ethnic group** primarily found in the **Middle East**, with a shared culture, history, and language. **Hence statement 1 is correct.**

Population & Distribution

- The total Kurdish population is estimated at **30–40 million** worldwide.
- They live mainly in:
 - **Turkey** (largest Kurdish population)
 - **Iran**
 - **Iraq**
 - **Syria**

- There is also a significant Kurdish **diaspora** in Europe, especially in **Germany, France, and Sweden.**

Language & Identity

- Kurds speak **Kurdish languages**, which belong to the **Iranian branch of the Indo-European family.** **Hence statement 3 is correct.**
- Major dialects include **Kurmanji** and **Sorani.**

Geographical Region

- The contiguous Kurdish-inhabited region across parts of **Turkey, Iraq, Iran, and Syria** is called "**Kurdistan**", meaning "*Land of the Kurds*".

Stateless Nation

- Kurds are considered the **largest stateless ethnic group in the world**, as they do not have an internationally recognised sovereign state. **Hence statement 2 is incorrect.**

Religion & Culture

- Most Kurds are **Sunni Muslims**, though there are **religious minorities** among them.

Autonomy & Politics

- Kurdish populations have sought varying degrees of **autonomy** or political rights, especially in **Iraq and Syria.**

PYQ REFERENCE: (2016)

Q. Consider the following pairs: (2016)

Community sometimes mentioned in the news : in the affairs of

1. Kurd : Bangladesh
2. Madhesi : Nepal
3. Rohingya : Myanmar

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

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

Source: <https://www.thehindu.com/news/international/syrian-military-announces-new-four-day-ceasefire-with-kurdish-led-forces/article70530810.ece>

9. Pax Silica

Q. Consider the following statements regarding Pax Silica:

1. Pax Silica is a US - led initiative focused on securing semiconductor and AI supply chains.
2. It is a legally binding treaty signed under the United Nations framework.
3. India is one of the signatory countries at the inaugural summit in the Pax Silica framework.

Which of the statements given above 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: The importance of Pax Silica for India

Pax Silica:

- **Pax Silica** is a **United States - led international initiative** focused on strengthening and coordinating **trusted supply chains** for advanced technologies such as **semiconductors, artificial intelligence (AI), critical minerals, advanced manufacturing, logistics, energy, and data infrastructure.** **Hence statement 1 is correct.**
- The initiative was **launched in December 2025** with the signing of the **Pax Silica Declaration**, which is a **non-binding political commitment**, not a formal treaty. **Hence statement 2 is incorrect.**
- The name "**Pax Silica**" combines "**Pax**" (Latin for peace and stability) with "**Silica**" (referring to silicon's precursor used in computer chips), highlighting its focus on **stable technology supply chains.**
- **Signatory countries** at the inaugural summit include:
 - **United States, Australia, Japan, South Korea, United Kingdom, Singapore, Israel, United Arab Emirates, Qatar.**
 - **Other participants/invitees** include **Netherlands, Canada, European Union, Taiwan, and India** (invited to join in January 2026). **Hence statement 3 is incorrect.**

- The initiative aims to **reduce coercive dependencies** and **enhance resilience** across technology supply chains, from mineral extraction and processing to chip manufacturing and computing infrastructure.

Source: <https://www.thehindu.com/news/international/the-importance-of-pax-silica-for-india/article70529093.ece>

10. Palermo Protocol

Q. With reference to the Palermo Protocol, consider the following statements:

1. It is a protocol under the United Nations Convention against Transnational Organized Crime.
2. It provides a legally binding international definition of human trafficking.
3. India is a signatory and party to the Palermo Protocol.

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: How should India tackle child trafficking?

Palermo Protocol:

- The Palermo Protocol is formally known as the **Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children**.
- It was adopted in **2000** at Palermo, Italy.
- It is a **supplementary protocol** to the United Nations Convention against Transnational Organized Crime (UNTOC). **Hence statement 1 is correct.**
- The protocol provides the **first internationally accepted definition of human trafficking**, covering recruitment, transportation, transfer, harbouring, or receipt of persons for exploitation. **Hence statement 2 is correct.**
- It places special emphasis on **women and children**, recognizing them as particularly vulnerable to trafficking.
- The protocol follows the **3P approach**: Prevention of trafficking, Protection of victims, and Prosecution of offenders.
- Consent of the victim is considered **irrelevant** when trafficking involves coercion, deception, or abuse of power.
- India is a **signatory and party** to the Palermo Protocol. **Hence statement 3 is correct.**

PYQ REFERENCE: (2005)

Q. Which one of the following statements is correct?

- (a) The first meeting of the Parties (MOP) to the Cartagena Protocol on Biosafety was held in Philippines in the year 2004.
- (b) India is not a signatory to the Biosafety protocol/ convention on Biological Diversity.
- (c) The Biosafety protocol deals with genetically modified organisms.**
- (d) United State of America is member of the Biosafety protocol/convention on Biological diversity

Source: <https://www.thehindu.com/news/national/how-should-india-tackle-child-trafficking-explained/article70523068.ece>

11. High Seas Treaty

Q. With reference to the High Seas Treaty, consider the following statements:

- I. It is the first legally binding international treaty to protect marine biodiversity in international waters.
- II. The treaty applies to the high seas and the seabed beyond national jurisdiction.
- III. The treaty provides for the creation of a legal framework for establishing Marine Protected Areas (MPAs) in the high seas.

Which of the statements given above are correct?

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

Answer: (c) I, II and III

Explanation:

In NEWS: High Seas Treaty takes effect after 60 countries ratify

The High Seas Treaty:

- The High Seas Treaty is formally known as the **Agreement under the United Nations Convention on the Law of the Sea (UNCLOS) on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Agreement)**.
- It is the first international legally binding instrument aimed at protecting marine biodiversity in international waters beyond national control. **Hence statement I is correct.**
- The treaty applies to the **high seas and the seabed beyond national jurisdiction**, which together cover about two-thirds of the world's oceans and nearly half the planet's surface. **Hence statement II is correct.**
- It is designed to conserve and sustainably use marine biological diversity in international waters, filling gaps in the existing framework under UNCLOS, which did not provide a comprehensive regime for high seas conservation.
- One of the main achievements is the **creation of a legal framework for establishing Marine Protected Areas (MPAs) in the high seas**, which make it possible to work toward global goals like protecting 30% of the ocean by 2030 ("30x30"). **Hence statement III is correct.**

The treaty addresses four key areas:

- Marine Genetic Resources (MGRs) including fair and equitable benefit-sharing
- Area-Based Management Tools (ABMTs) including Marine Protected Areas (MPAs)
- Environmental Impact Assessments (EIAs) for activities likely to harm biodiversity
- Capacity Building and Transfer of Marine Technology (CB&TMT) to support all parties, especially developing states

PYQ REFERENCE: (2022)

Q. With reference to the United Nations Convention on the Law of Sea, consider the following statements:

1. A coastal state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baseline determined in accordance with the convention.
2. Ships of all states, whether coastal or land-locked, enjoy the right of innocent passage through the territorial sea.
3. The Exclusive Economic Zone shall not extend beyond 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

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://epaper.thehindu.com/ccidist-
ws/th/th_international/issues/166989/OPS/G1LFE8HVR.1+GVGF756V.1.html](https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/166989/OPS/G1LFE8HVR.1+GVGF756V.1.html)

12. 2026 - United Nations international years

Q. Consider the following pairs

I	International Year of the Woman Farmer	2025
II	International Year of Rangelands and Pastoralists	2026
III	International Year of Volunteers for Sustainable Development	2027
IV	International Year of Sustainable and Resilient Tourism	2029

How many of the pairs given above are correctly matched?

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

Answer: (a) Only one

Explanation:

In NEWS: Not just forests: why grasslands also belong in national climate plans

UN International Years

- The United Nations designates specific years as International Years to raise global awareness, encourage action, and promote international cooperation on issues of global importance.
- These observances are usually established by the **UN General Assembly** through a resolution, often based on proposals by one or more member states and supported by UN agencies.

The UN has declared following observances:

For 2026

- International Year of Rangelands and Pastoralists. **Pair 2 is correct.**
- International Year of the Woman Farmer. **Pair 1 is incorrect.**

- International Year of Volunteers for Sustainable Development. **Pair 3 is incorrect.**

For 2025

- International Year of Quantum Science and Technology
- International Year of Cooperatives
- International Year of Glaciers' Preservation
- International Year of Peace and Trust

For 2027

- International Year of Legal Literacy
- International Year of Sustainable and Resilient Tourism. **Pair 4 is incorrect.**

For 2029 - International Year of Asteroid Awareness and Planetary Defence

PYQ REFERENCE: (2025)

Q. Consider the following pairs

- I. International Year of the Woman Farmer : 2026
- II. International Year of Sustainable and Resilient Tourism : 2027
- III. International Year of Peace and Trust : 2025
- IV. International Year of Asteroid Awareness and Planetary Defence : 2029

How many of the pairs given above are correctly matched?

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

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/grasslands-belong-national-global-climate-action-unfccc/article70477046.ece>
<https://www.un.org/en/observances/international-years>

13. India-AI Impact Summit 2026

Q. Consider the following statements regarding the India-AI Impact Summit 2026:

- I. It is the first global AI summit hosted in the Global South.
- II. The summit focuses exclusively on Artificial Intelligence applications in the defence and nuclear sectors.

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: (a) I only

Explanation:

In NEWS: Inclusive AI for India in focus at AI Impact Summit 2026 official pre-event hosted by AI4India, Intel and IHFC

India-AI Impact Summit 2026:

- The **India-AI Impact Summit 2026** is the **first global AI summit hosted in the Global South. Hence statement I is correct.**

- Dates: **16–20 February 2026**; Venue: **Bharat Mandapam, New Delhi**.
- Duration: **Five-day programme** covering **policy, research, industry, and public engagement**.
- **Foundational pillars (Sutras): People, Planet, Progress.**
- **India AI Impact Expo:** Over **400 exhibitors, seven thematic pavilions, ~1.5 lakh visitors** expected.
- AI is a **key enabler** for India's development, strengthening **governance, public service delivery, and inclusive growth**.
- AI applications include:
 1. **Healthcare:** Telemedicine, AI diagnostics, disease outbreak prediction, AI-driven drug discovery.
 2. **Agriculture & Rural Economy:** Crop prediction, precision farming, drone monitoring, market price prediction.
 3. **Education:** Personalized learning, AI tutors, multilingual content delivery.
 4. **Finance & Commerce:** Fraud detection, digital transactions, AI-powered credit scoring, chatbots.
 5. **Governance & Public Services:** Smart city management, translation of court judgments, improved service delivery. **Hence statement II is correct.**
- **Strategic initiatives:** IndiaAI Mission, AI compute infrastructure, promotion of indigenous AI models, capacity-building programs.
- **Seven Chakras** for multilateral cooperation:
 1. Human Capital – AI reskilling ecosystem.
 2. Inclusion for Social Empowerment – citizen-centric AI solutions.
 3. Safe and Trusted AI – responsible and interoperable AI governance.
 4. Resilience, Innovation, and Efficiency – sustainable AI adoption.
 5. Science – accelerate research in health, agriculture, climate.
 6. Democratizing AI Resources – equitable access to AI for startups, researchers, institutions.
 7. AI for Economic Growth & Social Good – inclusive growth through high-impact AI use cases.
- **Pre-Summit and Regional AI Conferences** are organized for early consultations, stakeholder engagement, and sectoral benchmarking.

PYQ REFERENCE: (2025)

Q. Consider the following statements regarding AI Action Summit held in Grand Palais, Paris in February 2025:

- I. Co-chaired with India, the event builds on the advances made at the Bletchley Summit held in 2023 and the Seoul Summit held in 2024.
- II. Along with other countries, US and UK also signed the declaration on inclusive sustainable AI.

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

Source: <https://economictimes.indiatimes.com/ai/ai-insights/inclusive-ai-for-india-in-focus-at-ai-impact-summit-2026-official-pre-event-hosted-by-ai4india-intel-and-ihfc/articleshow/126965126.cms>
<https://static.pib.gov.in/WriteReadData/specificdocs/documents/2026/jan/doc2026120762701.pdf>

GEOGRAPHY & MAPS

1. Tamsa River

Q. The Tamsa River is a tributary of which among the following rivers?

- (a) Yamuna
- (b) Ganga
- (c) Brahmaputra
- (d) Krishna

Answer: (b) Ganga

Explanation:

In NEWS: Mention of Tamsa River PM's address in the 130th Episode of 'Mann Ki Baat'

Tamsa River:

- The Tamsa River (also known as the Tons) is a significant **tributary of the Ganges** in India, originating in the Kaimur Range (Madhya Pradesh) and **flowing through Uttar Pradesh**, including Ayodhya. **Hence option (b) is correct.**
- **Origin:** Rises in a tank at Tamakund in the Kaimur Range, Madhya Pradesh, at an elevation of 610 meters.
- **Course:** Flows through Madhya Pradesh (Satna, Rewa) and Uttar Pradesh (Ambedkar Nagar, Faizabad/Ayodhya, Azamgarh, Mau, and Ballia) before joining the Ganges.
- **Mythological Significance:** According to the Ramayana, Lord Rama, Lakshmana, and Sita spent their first night of exile on the banks of the Tamsa. It is also associated with Sage Valmiki's ashram.
- **Rejuvenation:** Recently, the Tamsa has been transformed from a polluted state through community-led efforts and the Namami Gange programme, earning praise for its revival.
- **Geography:** It forms several waterfalls at the edge of the Purwa plateau.

PYQ REFERENCE: (2000)

Q. Assertion (A) : Ganga plain is the most densely populated part of India.

Reason (R) : Ganga is the most harnessed river of India.

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true but R is not a correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2218405®=3&lang=1>

2. Aravalli Range

Q. Consider the following:

1. Gujarat
2. Rajasthan
3. Punjab
4. Haryana
5. Delhi

The Aravalli range passes through which of the above given states/UT?

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

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

Explanation:

In NEWS: Multi-disciplinary team of experts to 'define' Aravallis

Aravalli Range:

Basic Geography

- The **Aravalli Range** is one of the **oldest fold mountain ranges** in the world.
- It runs in a **south-west to north-east direction** across **north-western India**.
- It extends from **Gujarat** through **Rajasthan** to **Haryana** and **Delhi**.

Hence (c) 1, 2, 4 and 5 is correct.

Geological Features

- Formed during the **Proterozoic era**.
- Composed mainly of **igneous and metamorphic rocks**.
- Highly **eroded and discontinuous** due to great age.

Important Peaks

- **Guru Shikhar** (Mount Abu, Rajasthan) – **highest peak** (~1,722 m).
- Mount Abu is the **only hill station of Rajasthan**.

Climatic & Ecological Role

- Acts as a **climatic divide**:
 - Western side: **Thar Desert** (arid region)
 - Eastern side: comparatively **semi-arid to sub-humid**
- Plays a crucial role in:
 - Preventing **eastward expansion of the Thar Desert**
 - Influencing **monsoon rainfall distribution**

Rivers

- Several rivers originate from the Aravallis, including:
 - **Banas**
 - **Luni**
 - **Sabarmati** (tributaries)

Environmental Significance

- Rich in **minerals** (copper, zinc, lead)
- Hosts **dry deciduous and thorn forests**
- Declared **ecologically sensitive** in parts due to mining and urban pressure

PYQ REFERENCE: (2023)

Q. Consider the following statements:

1. Amarkantak Hills are at the confluence of Vindhya and the Sahyadri Ranges.
2. Biligirirangan Hills constitute the easternmost part of Satpura Range.
3. Seshachalam Hills constitute the southernmost part of Western Ghats.

How many of the statements given above are correct?

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

Source: <https://www.thehindu.com/news/national/supreme-court-moots-expert-panel-from-different-walks-of-life-to-define-aravalli/article70533078.ece>

3. Major Grasslands of the World

Q. Consider the following pairs:

S. no	Grasslands	Locations	Type
1.	Prairies	North America	Temperate
2.	Manchuria	Asia	Tropical
3.	Pampas	South America	Temperate
4.	Veld	Africa	Tropical

Which of the pairs given above are correctly matched?

- (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: Not just forests: why grasslands also belong in national climate plans

Major Grasslands of the World

- Grasslands are vast, open landscapes primarily covered by grasses with few or no trees. These ecosystems are vital to global biodiversity, supporting a wide range of plant and animal species.

Types of Grasslands

- Grasslands are broadly classified based on their geographical location and climatic conditions. The two main types of grasslands are:

1. **Temperate Grasslands**
2. **Tropical Grasslands (Savannas)**

Temperate Grasslands

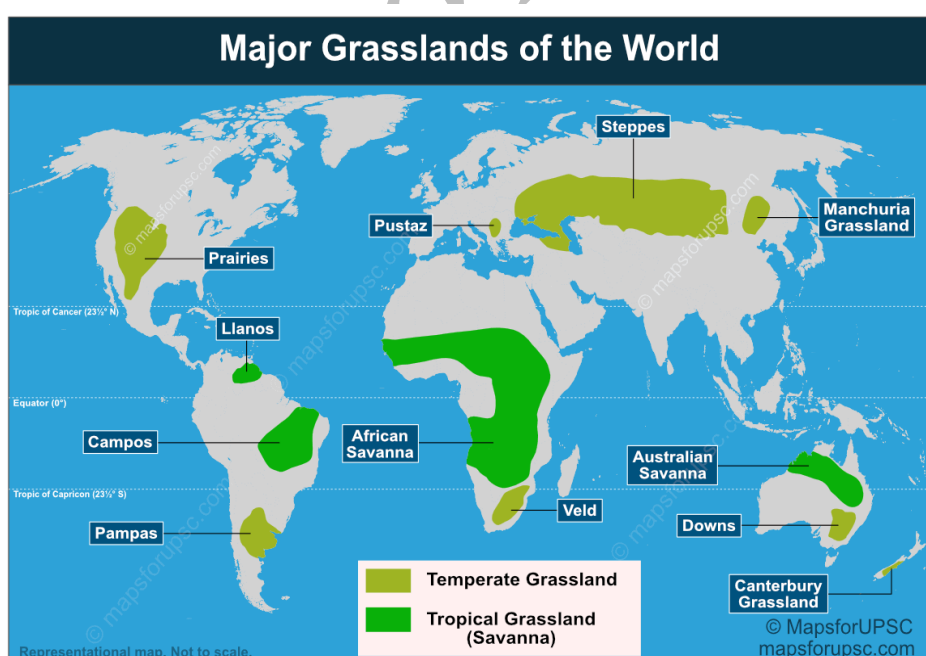
- **Climate:** Characterized by hot summers, cold winters, and moderate rainfall (25-75 cm annually).
- **Geographical Distribution:** Found primarily in North America (Prairies), South America (Pampas), Eurasia (Steppes), and parts of southern Africa and Australia.
- **Vegetation:** Dominated by grasses and wildflowers, with tallgrass prairies in wetter areas and shortgrass prairies in drier regions. Limited tree cover due to insufficient rainfall.
- **Soil:** Fertile, nutrient-rich soils ideal for agriculture, especially in North America.
- **Wildlife:** Supports diverse wildlife, including herbivores like **bison** and predators like **wolves**.
- Often referred to as the "**breadbaskets of the world**" due to their role in global food production.

Tropical Grasslands (Savannas)

- **Climate:** Warm year-round with distinct wet and dry seasons, receiving 50-150 cm of rainfall annually.
- **Geographical Distribution:** Found in regions like Africa (Savannas), South America, India, and northern Australia.
- **Vegetation:** Dominated by grasses with scattered trees like acacias and baobabs, adapted to periodic droughts and fires.
- **Wildlife:** Home to iconic species such as **elephants, lions, giraffes, zebras**, and a variety of herbivores and predators.

List of Major Grasslands of the World

Grasslands	Locations	Types
Prairies	North America	Temperate
Pustaz	Europe	Temperate
Steppes	Eurasia (Europe and Asia)	Temperate
Manchuria (Pair 2 is incorrect)	Asia	Temperate
Pampas	South America	Temperate
Veld (Pair 4 is incorrect)	Africa	Temperate
Downs	Oceania	Temperate
Canterbury	Oceania	Temperate
Llanos	South America	Tropical
Campos	South America	Tropical
African Savanna	Africa	Tropical
Australian Savanna	Oceania	Tropical



PYQ REFERENCE: (2021)

Q. The vegetation of Savannah consists of grassland with scattered small trees, but extensive areas have no trees. The forest development in such areas is generally kept in check by one or more or a combination of some conditions. Which of the following are such conditions?

1. Burrowing animals and termites
2. Fire
3. Grazing herbivores
4. Seasonal rainfall
5. Soil properties

Select the correct answer using the code given below.

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

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/grasslands-belong-national-global-climate-action-unfccc/article70477046.ece>

4. Doomsday Glacier

Q. Thwaites Glacier, known as the Doomsday Glacier, recently seen in news is located at

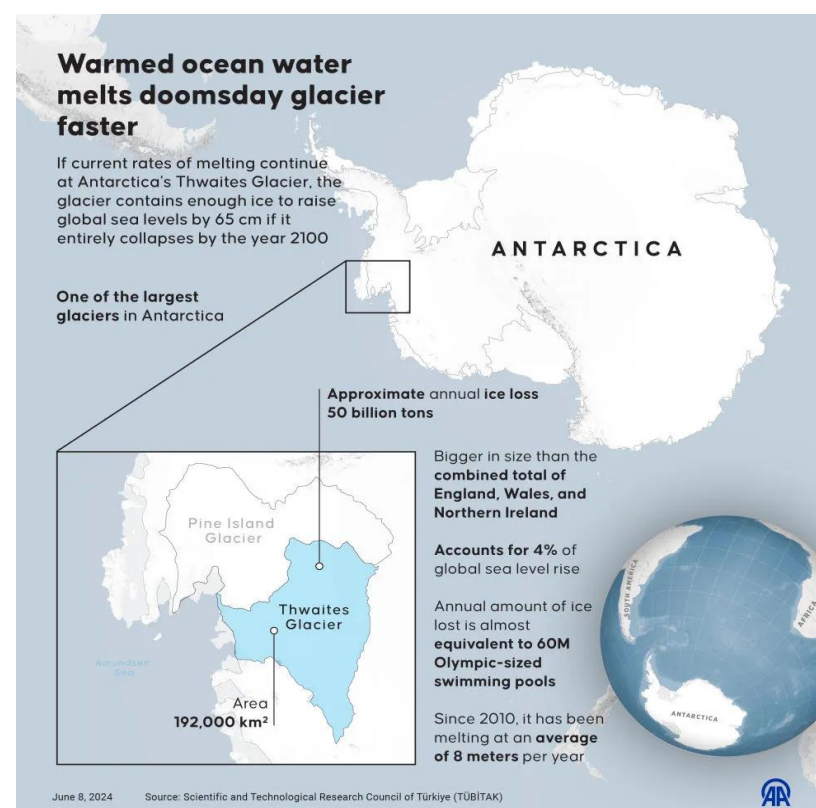
- (a) Arctic region
- (b) Antarctic region
- (c) Himalayan region
- (d) Oceania region

Answer: (b) Antarctic region

Explanation:

In NEWS: Doomsday glacier destabilisation shows future of Antarctic ice sheets

Thwaites Glacier (Doomsday Glacier):



- Thwaites Glacier is located in **West Antarctica** and drains into the **Amundsen Sea**.
- It is one of the **largest and widest glaciers in the world**, covering an area of about **192,000 square kilometres**. **Hence option (b) is correct.**
- Thwaites Glacier is popularly called the “**Doomsday Glacier**” due to its potential to cause significant **global sea-level rise** if it collapses.
- The complete collapse of Thwaites Glacier could contribute **up to around 65 centimetres** to global mean sea-level rise over time.
- The glacier plays a **critical buttressing role** in stabilising parts of the **West Antarctic Ice Sheet**.
- Thwaites Glacier is currently **losing mass and retreating rapidly**, primarily due to **warming ocean waters** beneath its floating ice shelf.
- The **floating ice shelf** of Thwaites Glacier acts as a brake on ice flow; its weakening or disintegration could **accelerate glacier discharge** into the ocean.
- Even without additional global warming, scientific models suggest that **continued retreat of Thwaites Glacier is likely** due to internal ice dynamics.
- Thwaites Glacier is considered part of the “**weak underbelly**” of the **West Antarctic Ice Sheet**.
- Destabilisation of Thwaites Glacier could trigger the **collapse of neighbouring glaciers**, amplifying global sea-level rise.

PYQ REFERENCE: (2020)

Q. Siachen Glacier is situated to the

- (a) East of Aksai Chin
- (b) East of Leh
- (c) North of Gilgit
- (d) North of Nubra Valley**

Source: <https://www.downtoearth.org.in/climate-change/doomsday-glacier-destabilisation-shows-future-of-antarctic-ice-sheets>

5. Polar Vortex

Q. Consider the following statements:

Statement I: A weakened polar vortex can lead to extreme winter cold in the south Arctic region.

Statement II: When the polar vortex is strong, the jet stream remains relatively circular, keeping Arctic air confined to polar regions.

Statement III: Uneven faster warming of the earth in polar regions compared to the tropics, can destabilize the polar vortex.

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

- (a) Both Statement II and Statement III are correct and both explain Statement I
- (b) Both Statement II and Statement III are correct but only one explains Statement I
- (c) Only Statement II is correct and it explains Statement I
- (d) Only Statement III is correct and it explains Statement I

Answer: (a) Both Statement II and Statement III are correct and both explain Statement I

Explanation:

In NEWS: Polar vortex: What’s behind the lethal winter storm in the United States?

Polar Vortex:

- A **polar vortex** is a **large area of low-pressure and cold air** swirling around the Arctic (North Pole) and Antarctic (South Pole).
- It exists in the **troposphere (0–15 km)** and **stratosphere (15–50 km)**.
- Normally, it confines the **cold Arctic air to the polar regions**.

Role of Jet Stream

- The **jet stream** is a narrow band of strong winds in the upper atmosphere.
 - **Strong polar vortex** → **circular jet stream** → **Arctic air confined** → normal winter conditions in mid-latitudes.
 - **Weak polar vortex** → **wavier jet stream** → **Arctic air spills south** → **extreme cold waves**.

Impact of Climate Change:

- The **polar regions are warming faster than the tropics** (Arctic amplification).
- This **reduces the temperature gradient** between the poles and mid-latitudes.
- As a result, the **polar vortex weakens**, becomes unstable, and can **displace cold air southwards**, causing winter storms in mid-latitudes.
- A **weakened polar vortex** allows Arctic air to migrate south, resulting in **extreme winter cold far from the poles**, including the US, Europe, and Asia.

Hence, Both Statement II and Statement III are correct and both explain Statement I

PYQ REFERENCE: (2025)

Q. Consider the following statements:

Statement I: The amount of dust particles in the atmosphere is more in subtropical and temperate areas than in equatorial and polar regions.

Statement II: Subtropical and temperate areas have less dry winds.

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

Source: <https://indianexpress.com/article/explained/explained-climate/polar-vortex-winter-storm-united-states-10495773/>

6. Ratle hydroelectric project

Q. Consider the following statements:

Statement-I: The Ratle hydroelectric project is a run-of-river hydro project designed for non-consumptive use.

Statement-II: The Ratle hydroelectric project is being built on one of the “western rivers” allocated primarily to Pakistan under the Indus Waters Treaty of 1960.

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

- (a) Both Statement-I and Statement-II are correct and Statement-I explains Statement-II
 (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: (a) Both Statement-I and Statement-II are correct and Statement-I explains Statement-II

Explanation:

In NEWS: Centre's panel affirms Ratle hydroelectric project green nod validity till December 2030

Ratle Hydroelectric Project:

- Ratle Hydroelectric Project (850 MW), is a Run of River Scheme located on **River Chenab** at village Drabshalla, district Kishtwar, Union Territory of **Jammu and Kashmir**.
- It is designed with a 133 m **gravity dam** and an underground powerhouse housing four main turbines, aiming to generate approximately 3,136 million units of electricity annually once completed.
- It has four **205 MW Francis turbines** and one 30 MW unit, giving an installed capacity of 850 MW.
- The project is executed by Ratle Hydroelectric Power Corporation Limited (RHPCL), a joint venture between NHPC Ltd and the Jammu and Kashmir government.
- The Ratle project is built on the Chenab, one of the "**western rivers**" (along with Jhelum and Indus) allocated primarily to Pakistan under the Indus Waters Treaty of 1960. The treaty allows India non-consumptive use such as run-of-river hydro projects but with design constraints to protect downstream flows.

Hence both Statement-I and Statement-II are correct and Statement-I explains Statement-II

PYQ REFERENCE: (1979)

Q. Which hydro-electric project produces maximum power energy ?

- (a) Bhakra Nangal
 (b) Koyna
 (c) Hirakud
 (d) Salal

Source: <https://indianexpress.com/article/india/centres-panel-affirms-ratle-hydroelectric-project-green-nod-validity-till-december-2030-10490895/>

7. India's Tunnels

Q. Consider the following statements with respect to the tunnels in India:

- India's first underwater metro tunnel is located in Kolkata.
- The Atal tunnel is officially recognised as the World's Longest Highway Tunnel above 10,000 feet.
- The Banihal-Qazigund Road Tunnel is built with two separate tubes and is interconnected by cross passages at every 500 metres.
- The Sekla tunnel and the Sonmarg tunnel are built using the New Austrian Tunneling Method.

Which of the statements given above are correct?

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

Answer: (d) I, II, III and IV

Explanation:

In NEWS: India's Tunnels: Engineering Marvels Beneath the Surface

Key Technologies Driving India's Tunnel Revolution

- **Tunnel Boring Machines (TBMs)**
 - Used extensively in metro networks and long rail/road tunnels, TBMs provide high precision, reduced vibration, and enhanced safety in densely populated and geologically complex regions.
- **New Austrian Tunnelling Method (NATM)**
 - Widely adopted in the Himalayas, NATM allows engineers to adapt excavation support in real time, making it ideal for variable and fragile rock formations.
- **Integrated Tunnel Control Systems (ITCS)**
 - Critical for modern road tunnels, ITCS combines ventilation control, fire detection, communication networks, CCTV, and emergency management into a centralised digital platform, ensuring 24/7 safety.

India's Landmark Tunnels: Defining Modern Infrastructure

Atal Tunnel

- Tucked beneath the snow-laden peaks of the Pir Panjal ranges, the Atal Tunnel stretches 9.02 km, providing a high-altitude passage that **bypasses Rohtang Pass**.
- It is officially recognised as the **World's Longest Highway Tunnel above 10,000 feet** in 2022 by the World Book of Records UK. **Hence statement II is correct.**
- The tunnel has cut the Manali-Sarchu distance by 46 km and reduced travel time by four to five hours.

Z-Morh/Sonamarg Tunnel

- The Sonamarg Tunnel, a 12-km engineering feat carved through mountains at an altitude of over 8,650 feet above sea level, is set to transform travel in **Jammu & Kashmir**.
- It includes a 6.4-km main tunnel, an egress tunnel, and modern approach roads creating an all-weather lifeline between Srinagar and the golden meadows of Sonamarg, and further towards Ladakh.
- Constructed using the **New Austrian Tunnelling Method (NATM)** for challenging Himalayan geology, the tunnel is a major technological milestone.
- It features an **Integrated Tunnel Management System (ITMS)** with advanced systems such as Public Address System, Electrical Fire Signalling System, Radio Re-Broadcast System (FM), Dynamic Road Information Panel (DRIP), etc.

Sela Tunnel

- The Sela Tunnel, dedicated to the nation during the Viksit Bharat Viksit North East programme in Itanagar, **Arunachal Pradesh**, is built by the BRO at 13,000 feet on the Tezpur-Tawang route.
- It ensures all-weather connectivity and holds immense strategic value for the Armed Forces while boosting socio-economic growth in the border region.

- Built using the **New Austrian Tunneling Method (NATM)**, it stands as a powerful reminder of how perseverance and regional commitment can reshape the future of remote mountain communities.

Hence statement IV is correct.

Banihal-Qazigund Road Tunnel

- The Banihal-Qazigund Road Tunnel, constructed at a cost of over ₹3,100 crore, is an 8.45-km-long twin-tube tunnel designed to significantly improve connectivity between **Jammu and Kashmir**.
- Built with two separate tubes, one for each direction of traffic, the tunnel is interconnected by cross passages at every 500 metres to facilitate maintenance and emergency evacuation.

Hence statement III is correct.

Dr Syama Prasad Mookerjee Tunnel

- Dr Syama Prasad Mookerjee Tunnel, formerly known as the **Chenani-Nashri Tunnel in Jammu & Kashmir** is a 9-km-long, twin-tube, all-weather road tunnel connecting Udhampur and Ramban.
- The tunnel features advanced ventilation, safety, and intelligent traffic systems operated through a fully integrated control mechanism with minimal human intervention, along with enhanced security measures.
- The project generated employment for over 2,000 local workers, with nearly 94 percent of the workforce drawn from Jammu and Kashmir.

Tunnel T50 under USBRL Project

- Tunnel T50, a 12.77-km engineering feat connecting **Khari and Sumer in Jammu & Kashmir**, stands as one of India's longest transportation tunnel constructed under the Udhampur-Srinagar-Baramulla Rail Link (USBRL) project, forming a crucial rail lifeline between the Kashmir Valley and the rest of the country.
- Constructed using the New Austrian Tunnelling Method, it cuts through challenging geology ranging from quartzite and gneiss to phyllite, with engineers overcoming high-water ingress, landslides, shear zones, and jointed volcanic rock.

Kolkata's Underwater Metro Tunnel

- In 2024, India marked a historic breakthrough with the launch of its first underwater metro tunnel in Kolkata, **linking Esplanade and Howrah Maidan beneath the Hooghly River**.
- This engineering feat not only showcases the nation's rising technological and infrastructural capabilities but also redefines urban mobility for one of India's busiest metropolitan regions.

Hence statement I is correct.

India's Next Wave of Tunnel Projects

Zojila Tunnel

The Zojila Tunnel is emerging as a monumental achievement in India's infrastructure landscape, cutting through some of the most formidable Himalayan rock formations to establish a dependable, all-weather link between Ladakh and the rest of the country.

Mumbai-Ahmedabad High-Speed Rail Tunnel

India's Mumbai-Ahmedabad High-Speed Rail corridor has marked a futuristic leap with the breakthrough on its 4.8-km undersea tunnel section. It is a defining feature of the nation's first bullet-train route.

Rishikesh-Karnaprayag New Rail Line Project Tunnels

The Rishikesh-Karnaprayag rail line in Uttarakhand is a landmark tunnelling project in the Indian Himalayas. Spanning about 125 km, the alignment passes through some of the most geologically complex and environmentally sensitive Himalayan terrain.

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/PressNoteDetails.aspx?id=156935&NotelId=156935&ModuleId=3®=46&lang=1>

8. India's First Open-Sea Marine Fish Farming Project

Q. India's first open-sea cage-based marine fish farming project, recently launched to promote the Blue Economy, is located in:

- (a) Gulf of Mannar near Tamil Nadu
(b) Arabian Sea near Lakshadweep
(c) Andaman Sea at North Bay
(d) Bay of Bengal off Odisha coast

Answer: (c) Andaman Sea at North Bay

Explanation:

In NEWS: Union Minister Dr Jitendra Singh Launches India's First Open-Sea Marine Fish Farming Project at North Bay, Andaman Sea; Ministry of Earth Sciences to Collaborate with UT Government of A&N

India's First Open-Sea Marine Fish Farming Project:

- India's first open-sea marine fish farming project has been launched in the **Andaman Sea at North Bay, Sri Vijaya Puram**. **Hence option (c) is correct.**
- It is implemented by the **Ministry of Earth Sciences** in collaboration with the **National Institute of Ocean Technology (NIOT)** and the **UT Administration of Andaman & Nicobar Islands**.
- The initiative focuses on **cage-based open-sea cultivation of marine finfish and seaweed** under natural oceanic conditions.
- NIOT has developed **advanced open-sea cage technology** capable of operating in high-energy marine environments.
- The project aims to promote the **Blue Economy** by integrating scientific innovation with livelihood generation for fishing communities.
- Under the marine flora component, **seaweed seeds** are provided to local communities for deep-water cultivation.
- Under the marine fauna component, **finfish seeds** are supplied for cage-based marine aquaculture.
- The project may be scaled up in the future through **public-private partnership (PPP) models** based on feasibility assessments.
- The initiative reflects a shift in India's policy approach since 2014 toward recognising the **economic potential of India's maritime domain**.

PYQ REFERENCE: (2013)

Q. The most important fishing grounds of the world are found in the regions where

- (a) warm and cold atmospheric currents meet
- (b) rivers drain out large amounts of freshwater into the sea
- (c) warm and cold oceanic currents meet**
- (d) continental shelf is undulating

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2215808®=3&lang=1>

ART AND CULTURE

1. Harvest Festivals in India

Q. Consider the following pairs:

Festival	State/Region
1. Pongal	Tamil Nadu
2. Bihu	Assam
3. Baisakhi	Punjab & Haryana
4. Nuakhai	Odisha

How many pairs given above are correctly matched?

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

Answer: (d) All four pairs

Explanation:

In NEWS: PM Modi extends greetings on Makar Sankranti, Magh Bihu and Pongal

- Calling Pongal a “shining symbol of the richness of Tamil traditions,” Mr. Modi extended his “warm Pongal wishes.”



Harvest Festivals in India:

- Harvest festivals in India are celebrated at the time of the **main harvest of a particular region**, which varies due to differences in climate and cropping patterns.
- Each Indian State celebrates its harvest festival at **different times of the year**, reflecting regional agricultural cycles.
- **Bihu, Pongal, Makar Sankranti and Lohri** are major harvest festivals celebrated in different parts of India under different names.
- Despite regional diversity, the **core significance of all harvest festivals is gratitude for a bountiful harvest**.
- Harvest festivals mark the celebration of the **first yield of the new crop**, especially important for farming communities.

Major Harvest Festivals in India:

Festival	State/Region	Month / Season	Significance / Notes
Pongal	Tamil Nadu	January	Four-day harvest festival thanking Sun God, nature, and cattle
Makar Sankranti	Pan-India (Uttar Pradesh, Gujarat, Maharashtra, etc.)	January 14-15	Marks sun's northward movement; harvest festival of northern India
Baisakhi / Vaisakhi	Punjab, Haryana	April	Harvest of rabi crops; Punjabi New Year
Lohri	Punjab, Haryana, Himachal Pradesh	January 13	Winter harvest festival; bonfires, folk songs and dances
Bihu	Assam	April (Bohag Bihu)	Assamese New Year; celebrates rice harvest
Nuakhai	Western Odisha	August-September	First paddy harvest; community thanksgiving
Onam	Kerala	August-September	10-day festival; mythological King Mahabali and harvest
Gudi Padwa	Maharashtra	March-April	Marathi New Year; harvest of Rabi crops
Ugadi	Andhra Pradesh, Karnataka	March-April	New Year and harvest celebration
Vishu	Kerala	April	Marks start of spring; new harvest
Nabanna	West Bengal	October-November	Celebration of new rice harvest

Wangala	Meghalaya (Garo tribe)	September–October	Post-harvest thanksgiving with drums
Dree Festival	Arunachal Pradesh (Apatani tribe)	July–August	Agricultural thanksgiving festival
Agera	East Indian Catholics (Mumbai)	August–September	Harvest thanksgiving festival

Hence All four pairs are correctly matched.

PYQ REFERENCE: (2018)

Q. Consider the following pairs:

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) 1 and 3
(d) 2 and 3

Source: <https://www.thehindu.com/news/national/pm-modi-extends-greetings-on-makar-sankranti-magh-bihu-and-pongal/article70508192.ece>

2. Theyyam

Q. Theyyam, a ritual art form characterised by elaborate headgear and the belief that the performer embodies the deity, is primarily the art form of which among the following states?

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

Answer: (b) Northern Kerala

Explanation:

In NEWS: Theyyam, a ritual art form of northern Kerala, during an event in Bengaluru on Thursday

Theyyam:

● Theyyam is a ritualistic art form practiced in northern Kerala, especially in Kannur, Kasaragod, Kozhikode, and Wayanad districts.

Hence option (b) is correct.

- The term *Theyyam* is derived from “Daivam”, meaning God.
- It is a living tradition of ancestor and hero worship, combining dance, music, mime, and ritual.
- Performers are believed to embody the deity during the ritual.
- Traditionally performed by Dalit and lower-caste communities, such as Malayan, Vannan, and Velan.
- Performed in sacred groves (Kavu), temples, or ancestral houses.
- The performances usually take place between October and May.
- Distinctive features include:

- Elaborate facial makeup
- Towering headgear (Mudi)
- Vivid costumes
- Use of traditional percussion instruments like *Chenda* and *Elathalam*.
- Theyyam is not merely a dance but a socio-religious institution, reflecting local history, ecology, and social order.



PYQ REFERENCE: (2018)

Q. Consider the following pairs of Tradition vs 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

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/167397/OPS/G7VFFLHCD.1+G6CF_FPC29.1.html

3. Ajanta-Ellora

Q. Consider the following statements:

1. Ajanta Caves are situated on the Waghur river valley, whereas Ellora Caves are situated along Indra - Godavari river region.
2. Ajanta and Ellora were together designated as a UNESCO World Heritage Site in 1983.
3. Ajanta Caves include Buddhist, Hindu, and Jain caves, whereas Ellora Caves are primarily Buddhist, with viharas and chaityas.

How many of the statements given above are correct?

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

Answer: (b) Only two

Explanation:

In NEWS: 11th Ajanta-Ellora International Film Festival to begin today

Ajanta and Ellora Caves:

Location

- **Ajanta Caves** – Maharashtra, near **Aurangabad**; on the **Waghur river valley**.
- **Ellora Caves** – Maharashtra, near **Aurangabad**; 29 km from Ajanta; along **Indra/Godavari river region**. **Hence statement 1 is correct.**

Period & Cultural Significance

Caves	Religion	Period	Key Features
Ajanta	Buddhist	2nd century BCE – 480 CE	30 rock-cut caves; mainly monasteries (viharas) and prayer halls (chaityas); famous Buddhist murals & frescoes depicting Jataka tales.
Ellora	Hindu, Buddhist, Jain	6th – 10th century CE	34 rock-cut caves; 12 Buddhist, 17 Hindu, 5 Jain; Kailasa Temple (Cave 16) – largest monolithic rock-cut temple in the world.

Hence statement 3 is incorrect.

Architecture & Art

Ajanta

- **Chaitya halls:** Prayer halls with stupa at center.
- **Viharas:** Monastic residences.
- **Murals:** Frescoes in natural pigments; depict **Buddha's life, Jataka tales**.
- Rock-cut **monastic architecture**, influenced by Hinayana & Mahayana Buddhism.

Ellora

- **Kailasa Temple:** Carved **top-down from a single rock**; represents **Mount Kailash**.
- **Hindu caves:** Temples dedicated to Shiva, Vishnu, etc.
- **Jain caves:** Symmetrical, detailed sculptures; religious coexistence.
- **Buddhist caves:** Early viharas, chaityas, stupas.

UNESCO World Heritage Site

- **Ajanta and Ellora together were designated in 1983. Hence statement 2 is correct.**
- Recognized for **outstanding universal value**, art, and rock-cut architecture.

Geographical Importance

- **Ajanta:** cliff over **Waghur river**, horseshoe-shaped valley – natural protection for monks.
- **Ellora:** basalt hills; **rock-cut temples** carved from volcanic basalt.

Historical Context

- **Ajanta:** Patronized by **Satavahanas, Vakatakas**; reflects Buddhist devotional culture.
- **Ellora:** Patronized by **Rashtrakutas**; shows **religious tolerance and integration** in medieval India.

Conservation & Tourism

- Both caves are **protected monuments under ASI**.
- Famous for attracting **archaeologists, historians, and tourists**.
- Vulnerable to **water seepage, humidity, and vandalism**, Ajanta murals are especially delicate.

PYQ REFERENCE: (2021)

Q. Which one of the following statements is correct?

- (a) Ajanta Caves lie in the gorge of Waghora River.
- (b) Sanchi Stupa lies in the gorge of Chambal River.
- (c) Pandu-lena Cave Shrines lie in the gorge of Narmada River.
- (d) Amaravati Stupa lies in the gorge of Godavari River.

Source: <https://www.newsonair.gov.in/11th-ajanta-ellora-international-film-festival-to-begin-today/>

4. Somnath Temple

Q. With reference to the Somnath Temple, consider the following statements:

- I. The first attack on Somnath took place in 1299 CE by Ulugh Khan.
- II. It is revered as the first among the twelve Jyotirlinga shrines in India.
- III. The current temple is built in the Solanki style of temple architecture.

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: (b) II and III only

Explanation:

In NEWS: Prime Minister Pays Tribute to Somnath's Resilience, marking the historic milestone of 1000 years since the first attack on Somnath in 1026 AD.

Somnath Temple:

- Somnath Temple is located at Prabhas Patan near Veraval in **Gujarat** and is dedicated to Lord Shiva.
- It is revered as the **first among the twelve Jyotirlinga shrines** of Hinduism. **Hence statement II is correct.**
- The name Somnath means **"Lord of the Moon."**
- Historically, the temple was destroyed and rebuilt several times, **beginning with the attack by Mahmud of Ghazni in 1026 CE. Hence statement I is incorrect.**
- Repeated Destruction: The temple was destroyed several times by different invaders:
 - 1026 CE by Mahmud of Ghazni
 - 1299 by Ulugh Khan
 - 1395 by Muzaffar Shah I
 - 1706 by Aurangzeb
- After India's independence, the temple was rebuilt and completed in 1951 under the guidance of leaders including Sardar Vallabhbhai Patel.
- The current temple is built in the Solanki (Chalukya) style of Hindu temple architecture. **Hence statement III is correct.**

PYQ REFERENCE: (2022)

Q. The Prime Minister recently inaugurated the new Circuit House near Somanath Temple at Verval. Which of the following statements are correct regarding Somnath Temple?

1. Somnath Temple is one of the Jyotirlinga shrines
2. A description of Somnath Temple was given by Al-Biruni.
3. Pran Pratistha of Somnath Temple (installation of the present-day temple) was done by President S. Radhakrishnan.

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2211330®=3&lang=1>

5. Char Dham temples

Q. Consider the following statements:

1. All the Char Dham temples are located in Uttarakhand.
2. All the Char Dham temples have Lord Shiva as its primary deity.

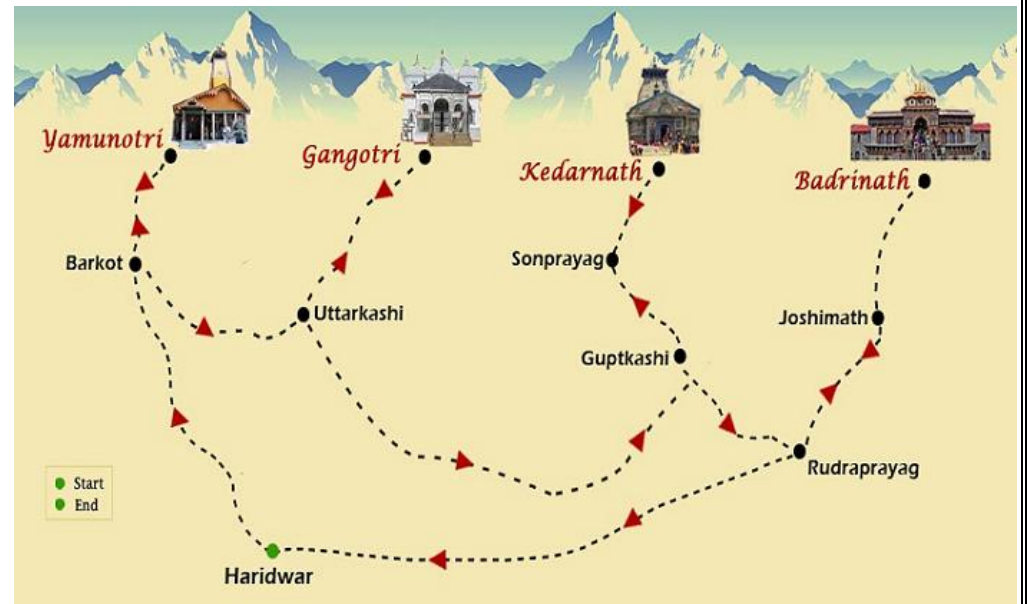
Which of the statements given above is/are correct?

- (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 temples seek to prohibit entry of non-Hindus
The **Char Dham** refers to **four sacred Hindu pilgrimage sites in India**. Visiting them is considered highly auspicious and spiritually cleansing. All the Char Dham temples are situated in the Himalayas of **Uttarakhand. Hence statement 1 is correct.** They are:


Badrinath (Lord Vishnu)

- **Deity:** Lord **Vishnu** in the form of **Badrinarayan. Hence statement 2 is incorrect.**
- **Location:** Situated at **3,133 meters (10,279 ft)** in the Garhwal region of **Uttarakhand**, between the Nar and Narayan mountain ranges, along the **Alaknanda River**.
- **Religious Significance:**
 - One of the **Divya Desams**, sacred shrines of Vishnu mentioned in Tamil Vaishnavite texts.
 - Pilgrims believe visiting Badrinath **helps attain moksha (liberation from the cycle of life and death).**
- **Historical Note:** The present temple was **reconstructed by Adi Shankaracharya in the 9th century CE**, although the site has been revered for thousands of years.
- **Unique Feature:** The **sacred hot spring Tapt Kund** near the temple is believed to have **healing properties.**

Kedarnath (Lord Shiva)

- **Deity:** Lord **Shiva**, in the form of **Kedarnath Jyotirlinga.**
- **Location:** Located near the **Mandakini River at an altitude of 3,583 meters (11,755 ft)** in the Himalayas.
- **Religious Significance:**
 - One of the **12 Jyotirlingas**, which are the holiest shrines of Shiva in India.
 - Pilgrims seek **spiritual purification and liberation** by offering prayers to Kedarnath.
- **Historical Note:** The temple is believed to have been originally built by the **Pandavas** from the Mahabharata, with its current structure attributed to **Adi Shankaracharya.**
- **Unique Feature:** **Snow-capped peaks** surround the temple, giving it a serene and mystical environment. The area is accessible only for **6 months**, due to heavy snowfall.

Gangotri (Goddess Ganga)

- **Deity:** Goddess **Ganga**, personified as the sacred river Ganges. **Hence statement 2 is incorrect.**
- **Location:** Situated at **3,041 meters (9,977 ft)** in **Uttarkashi district**, along the Bhagirathi River, which originates from the **Gangotri Glacier.**
- **Religious Significance:**

- The temple commemorates the **descent of the Ganges from heaven to earth**, as per Hindu mythology.
- Pilgrims perform **ritual ablutions in the Bhagirathi River**, believing it **cleanses sins and purifies the soul**.
- **Historical Note:** The original temple was built in the **18th century by Gorkhas**, and later reconstructed.
- **Unique Feature:** Gangotri is a **source pilgrimage site**, with the glacier nearby being considered the **physical origin of the holy Ganges**.

Yamunotri (Goddess Yamuna)

- **Deity:** Goddess **Yamuna**, the personification of the Yamuna River. **Hence statement 2 is incorrect.**
- **Location:** Situated at **3,293 meters (10,810 ft) in the western Garhwal region of Uttarakhand**, near the **bandarpunch range of the Himalayas**.
- **Religious Significance:**
 - The temple marks the **source of the Yamuna River**, which flows through **important pilgrimage cities** like Mathura and Vrindavan.
 - Pilgrims bathe in the **hot water springs of Yamunotri**, which are believed to have **healing and purifying properties**.
- **Historical Note:** The temple is believed to have been **established in the 19th century**.
- **Unique Feature:** **Surrounded by rugged mountains and glaciers**, Yamunotri is both **spiritually and scenically significant**.

PYQ REFERENCE: (1996)

Q. Which one of the following temples figured in the news regarding the institution of the Devadasi?

- (a) Jagannath temple, Puri
- (b) Pashupatinath temple, Kathmandu
- (c) Kandariya Mahadev temple, Khajuraho
- (d) Chausath Yogini temple, Bhedaghat

Source:

<https://www.thehindu.com/news/national/uttarakhand/debate-rages-over-entry-of-non-hindus-into-badrinath-kedarnath/article70552680.ece>

6. Lala Lajpat Rai

Q. With reference to Lala Lajpat Rai, which of the following statements is/are correct?

1. He wrote the book 'Young India' in 1916.
2. He founded the Servants of the People Society in 1921.
3. He led a peaceful protest march in Lahore against the Simon Commission in 1928.

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: Prime Minister pays homage to Punjab Kesari Lala Lajpat Rai

Lala Lajpat Rai:



- **Lala Lajpat Rai** (28 January 1865 – 17 November 1928) was a prominent **Indian nationalist leader, politician, author, and freedom fighter** during the struggle against British colonial rule.
- He is popularly known as **"Punjab Kesari"** (the *Lion of Punjab*) for his fierce patriotism and leadership.
- Rai initially studied law at **Government College, Lahore**, where he became influenced by the **Arya Samaj reform movement** and began his involvement in nationalist politics.
- Rai was one of the leading members of the **Indian National Congress** and part of the famous **"Lal-Bal-Pal"** trio (with Bal Gangadhar Tilak and Bipin Chandra Pal), a group known for promoting **militant nationalism** and opposition to British rule.
- He strongly advocated for **Swaraj (self-rule)**, the **Swadeshi movement (use of Indian goods)**, and social reforms, believing that Indians should take pride in their own culture and capacities.
- Rai also founded the **Servants of the People Society in 1921** to promote public service and social welfare work. **Hence statement 2 is correct.**
- He was a **prolific writer and speaker**, contributing to newspapers and writing books like *The Story of My Deportation (1908)* and *Young India (1916)*. His works critiqued British policies and inspired patriotic sentiment among Indians. **Hence statement 1 is correct.**
- In **1928**, when the British government set up the **Simon Commission**, a body with no Indian members to review constitutional reforms. Rai led a **peaceful protest march in Lahore** demanding **"Simon Go Back!"** **Hence statement 3 is correct.**
- During this protest, he was **brutally assaulted by police (lathi charge)** under the British police superintendent **James A. Scott**. Rai suffered severe injuries but continued to address supporters with the famous line, *"Every blow aimed at me is a nail in the coffin of British rule in India."*
- Rai did not fully recover from those injuries and **died on 17 November 1928**. His death sparked widespread outrage and intensified the Indian struggle for independence.

PYQ REFERENCE: (2018)

Q. He wrote biographies of Mazzini, Garibaldi, Shivaji and Shrikrishna ; stayed in America for some time; and was also elected to the Central Assembly. He was

- (a) Aurobindo Ghosh
- (b) Bipin Chandra Pal
- (c) **Lala Lajpat Rai**
- (d) Motilal Nehru

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2219418®=3&lang=1>

7. Rani Velu Nachiyar

Q. After losing her husband in battle in 1772, organized resistance against the British, formed a female army, and reclaimed her kingdom with the help of allies like Hyder Ali. She was

- (a) Rani Lakshmibai
- (b) Velu Nachiyar
- (c) Rani Chennamma
- (d) Ahilyabai Holkar

Answer: (b) Velu Nachiyar

Explanation:

In NEWS: Prime Minister Pays Tribute to Rani Velu Nachiyar on Her Birth Anniversary

Rani Velu Nachiyar:

- Velu Nachiyar was an 18th-century Indian queen and warrior from the Sivaganga region of present-day Tamil Nadu.
- She was born on 3 January 1730 into the royal family of Ramanathapuram and was trained in horse riding, archery, swordsmanship, martial arts, and multiple languages from a young age.
- After her husband, the king of Sivaganga, was killed in battle against invading forces in 1772, she sought support from allies including Hyder Ali and organised resistance against the British East India Company.
- She formed a strong women's military unit, known as Udaiyaal's force, highlighting early women's participation in warfare.
- Her commander Kuyili is remembered as one of the earliest recorded female suicide bombers, who destroyed a British ammunition depot during the war.
- Velu Nachiyar maintained strategic alliances with Hyder Ali of Mysore, who provided military and logistical support.
- With their help and her own army, she successfully defeated the British and reclaimed her kingdom in 1780. She then ruled Sivaganga for about ten years.
- Velu Nachiyar is remembered as one of the first Indian female leaders to fight against British colonial power, and she continued to resist foreign domination and inspire others.
- She died on 25 December 1796 after a decade of rule.

Hence option (b) is correct.

PYQ REFERENCE: [2001]

Q. Which of the following pairs is not correctly matched?

- (a) India's first technicolour film – Jhansi ki Rani
- (b) India's first 3-D film – My dear Kuttichathan
- (c) India's first insured film – Taal
- (d) India's first actress to win the Bharat Ratna – Meena Kumari

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210996®=3&lang=1>

8. Mamallan reservoir

Q. The Mamallan Reservoir located in Tamil Nadu is named after which notable ruler of Ancient India?

- (a) Raja Raja Chola I
- (b) Narasimhavarman I
- (c) Mahendravarman I
- (d) Nandivarman II

Answer: (b) Narasimhavarman I

Explanation:

In NEWS: CM lays foundation for ₹342-crore Mamallan reservoir

Mamallan Reservoir:

- **Location:** Near Nemmeli, East Coast Road (ECR), Chengalpattu district, Tamil Nadu.
- **Purpose:** To augment drinking water supply for Chennai and adjoining suburbs.
- **Capacity:** About 1.65 TMC (thousand million cubic feet).
- **Coverage:** Benefits around 13 lakh people in areas like Sholinganallur, Medavakkam, Pallikaranai, Siruseri, Kelambakkam, and Mamallapuram.
- **Supply:** Designed to deliver ~170 million litres of water per day (MLD).
- **Size:** Spread over 5,100–5,161 acres with a 34 km bund.
- **Historical Link:** Named after Narasimhavarman I ("Mamallan"), the Pallava king who founded Mamallapuram. **Hence option (b) is correct.**
- **Additional Works:** Includes restoration of a 15 km stretch of Buckingham Canal to aid water management and local fishing communities.
- **Significance:** Chennai's sixth major reservoir, improves urban water security, prevents seawater intrusion, and supports groundwater recharge.

PYQ REFERENCE: (2022)

Q. Consider the following pairs:

Reservoirs	States
1. Ghataprabha	:Telangana
2. Gandhi Sagar	:Madhya Pradesh
3. Indira Sagar	:Andhra Pradesh
4. Maithon	:Chhattisgarh

How many pairs given above are not correctly matched?

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

Source: <https://epaper.thehindu.com/ccidist->

[ws/th/th_international/issues/166989/OPS/G1LFE8HV8.1+G3NF9H35.1.html](https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/166989/OPS/G1LFE8HV8.1+G3NF9H35.1.html)

9. Sangam Literature

Q. Which one of the following statements about Sangam literature in ancient South India is not correct?

- (a) Sangam literature is mostly religious in nature.
- (b) Silappadikaram and Manimekalai are not part of Sangam corpus.
- (c) Tirukkural is post-Sangam, though rooted in classical Tamil tradition.
- (d) Pathitruvalu is the only Sangam text exclusively on Chera kings.

Answer: (a) Sangam literature is mostly religious in nature.

Explanation:

In NEWS: Education Minister releases 55 volumes of literary works

- The books are released in classical Indian languages such as Kannada, Odia, Telugu, Malayalam, and Tamil, along with a sign-language series of the Tirukkural by Tamil poet Thiruvalluvar

Sangam Literature:

- Sangam literature refers to the earliest body of Tamil literary works, dating roughly from 300 BCE to 300 CE.
- It is associated with three Sangams (academies) traditionally held at Madurai under the patronage of the Pandya rulers.
- Tolkaappiyam is the earliest Tamil grammar and a Sangam-era work.
- Sangam literature is not religious in nature (mostly secular).

Hence option (a) is not correct.

- Silappadikaram and Manimekalai are post-Sangam epics (not part of Sangam corpus). Hence option (b) is correct.

- Tirukkural is post-Sangam, though rooted in classical Tamil tradition. Hence option (c) is correct.

- Pathitruvalu is the only Sangam text exclusively on Chera kings. Hence option (d) is correct.

Hence option (d) is correct.

- Sangam literature provides insights into:

- Early Tamil society
- Political life of Cheras, Cholas and Pandyas
- Trade (including Roman trade)
- Social customs and economy

Themes and Classification

- Akam (Interior): Love, emotions, personal life
- Puram (Exterior): War, valor, charity, kingship
- Based on Tinai (landscape) classification:
 - Kurinji – Mountains (love, union)
 - Mullai – Forests (waiting)
 - Marutham – Agricultural land (domestic life)
 - Neithal – Coastal (separation)
 - Palai – Arid (hardship)

Major Categories of Sangam Literature

1. Ettuthokai (Eight Anthologies)

- A collection of eight anthologies of poems. Includes:
 - Akananuru, Purananuru, Kuruntokai, Narrinai, Ainkurunuru, Kalithokai, Paripadal, Pathitruvalu

2. Pattuppattu (Ten Idylls)

- A collection of ten long poems. Notable works:
 - Tirumurugarrupadai, Maduraikanchi, Pattinappalai, Porunarupadai, Perumpanarrupadai, Sirupanarrupadai,

Malaipadukadam,
Perumpanarrupadai

Nedunalvada,

Kurinjippattu,

PYQ REFERENCE: (2022)

Q. Which one of the following statement about Sangam literature in ancient South India is correct?

- (a) Sangam poems are devoid of any reference to material culture.
- (b) The social classification of Varna was known to Sangam poets.
- (c) Sangam poems have no reference to warrior ethic.
- (d) Sangam literature refers to magical forces as irrational.

Source: <https://www.thehindu.com/news/national/union-minister-dharmendra-pradhan-releases-55-literary-works-developed-by-classical-language-centres/article70478596.ece>

10. Bhadrakali inscription

Q. According to the inscriptional tradition recorded in the Bhadrakali inscription about the Somnath temple, which of the following pairs is/are correctly matched?

- | YUGA | TEMPLE CONSTRUCTION |
|-----------------|---|
| 1. Satya Yuga | – Construction by Chandra using gold |
| 2. Treta Yuga | – Construction by Ravana using silver |
| 3. Dvapara Yuga | – Construction by Shri Krishna using wood |
| 4. Kali Yuga | – Construction by Kumarapala using stone |

Select the correct answer using the code given below:

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

Answer: (a) 1, 2 and 3 only

Explanation:

In NEWS: Bhadrakali Temple Inscription Chronicles Somnath's Timeless Legacy and Kumarapala's Role in Its Revival

Bhadrakali Temple Inscription:

- This inscription, carved in 1169 CE (Valabhi Samvat 850 and Vikram Samvat 1255) and currently protected by the State Department of Archaeology, is a eulogistic inscription of Param Pashupata Acharya Shriman Bhavabrihaspati, the spiritual preceptor of Maharajadhiraj Kumarapala of Anhilwad Patan.
- This inscription records the ancient and medieval history of the Somnath Temple.
- It mentions the construction of Somnath Mahadev in all four yugas.
 - Accordingly, in the Satya Yuga, Chandra (Soma) built it of gold; in the Treta Yuga, Ravana built it of silver; in the Dvapara Yuga, Shri Krishna built it of wood; and in the Kali Yuga, King Bhimdev Solanki constructed a beautifully artistic stone temple.
 - History confirms that Bhimdev Solanki built the fourth temple on the earlier remains, followed by the fifth temple constructed by Kumarapala in 1169 CE at the same site.
 - Under Solanki rule, Prabhas Patan emerged as a major center of religion, architecture, and literature, while the justice of Siddharaj

Jaysinh and the devotion of Kumarapala raised Somnath as a proud symbol of Gujarat's Golden Age.

Hence option (a) is correct.

PYQ REFERENCE: (2019)

Q. In which of the following relief sculpture inscriptions is 'Ranyo Ashoka' (King Ashoka) mentioned along with the stone portrait of Ashoka?

- (a) Kanganahalli
- (b) Sanchi
- (c) Shahbazagrhi
- (d) Sohgaoura

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2213389®=3&lang=1>

11. Buddhist Sites in UNESCO Tentative List

Q. Consider the following pairs:

Buddhist Sites	State
1. Ratnagiri	Rajasthan
2. Udayagiri	Gujarat
3. Lalitgiri	Odisha

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

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

Answer: (d) 3 only

Explanation:

In NEWS: State's 3 Buddhist sites in tentative list for Unesco 'World Heritage' tag

Buddhist Sites in UNESCO Tentative List:

- UNESCO has added the 'Diamond Triangle' of Ratnagiri, Udayagiri, and Lalitgiri in Odisha to India's tentative list for World Heritage status. **Hence pair 3 is correctly matched.**
- These sites are located in Jajpur and Cuttack districts of Odisha.
- The Archaeological Survey of India (ASI) compiled and submitted the nomination to UNESCO through India's permanent representative.

Historical and Cultural Significance

- The three sites witnessed propagation of all **three major schools of Buddhism: Hinayana, Mahayana, and Vajrayana.**
- **Ratnagiri:** Largest site, spread over **18 acres**, located on **Assia hill range**, banks of **Kelua river**.
- **Udayagiri:** Traditionally called '**hill of rising sun**'.
- **Lalitgiri:** Traditionally called '**red hill**'.

- All three sites have **stupas, monasteries, relics, and statues** of Lord Buddha and other Buddhist deities.

UNESCO Tentative List Details

- Entry into the **tentative list** is mandatory before a site can be **nominated for World Heritage inscription.**
- India currently has **70 sites on the tentative list**, classified as **cultural, natural, and mixed.**
- Other Odisha sites on the tentative list include: **Ekamra Kshetra (Bhubaneswar), Chilika Lake (Ganjam district), and Chausathi Yogini temples** in Bhubaneswar and Balangir.

PYQ REFERENCE: (2022)

Q. Consider the following pairs:

	Site of Ashoka's major rock edicts	Location in the State of
I	Dhauli	Odisha
II	Erragudi	Andhra Pradesh
III	Jaugada	Madhya Pradesh
IV	Kalsi	Karnataka

How many pairs given above are correctly matched?

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

Source:

<https://timesofindia.indiatimes.com/city/bhubaneswar/states-3-buddhist-sites-in-tentative-list-for-unesco-world-heritage-tag/articleshowprint/127320750.cms?val=3728>

PLACES IN INEWS

1. Rafah border crossing

Q. Why is the Rafah Border Crossing particularly important during conflict in Gaza?

- (a) It allows Israel to control all trade
- (b) It serves as the main international airport for Gaza
- (c) It provides the only viable external link when land, sea, and air routes are restricted
- (d) It is the headquarters of the Palestinian Authority

Answer: (c) It provides the only viable external link when land, sea, and air routes are restricted

Explanation:

In NEWS: Rafah border crossing between Gaza and Egypt could reopen to increase humanitarian efforts

Rafah Border Crossing:



- The Rafah Border Crossing is the only border crossing **between the Gaza Strip and Egypt and is located in Rafah at the southern edge of Gaza and the northern border of Egypt.**
- It serves as **Gaza's sole gateway to a country other than Israel**, making it crucial for people movement and humanitarian access.
- The crossing was **opened after the 1979 Egypt-Israel peace treaty and remained under Israeli control until 2005.**
- In 2005, control was transferred to the Palestinian Authority on the Gaza side and Egyptian Border Guards on the Egyptian side, with oversight from the European Union Border Assistance Mission (EUBAM Rafah).
- After Hamas took control of Gaza in 2007, the EU mission withdrew, and Egypt closed the crossing. Since then, Rafah has only been opened intermittently for limited movements.
- Rafah is vital for **humanitarian aid delivery, access to medical care, and travel out of Gaza**, because the other border crossings are controlled by Israel.
- It is especially important during conflict when land, sea, and air access to Gaza is restricted, making Rafah the primary external link for civilians. **Hence option (c) is correct.**

PYQ REFERENCE: (2023)

Q. Consider the following pairs:

	Region often mentioned in news	Reason for being in news
I	North Kivu and Ituri	War between Armenia and Azerbaijan
II	Nagorno-Karabakh	Insurgency in Mozambique
III	Kherson and Zaporizhzhia	Dispute between Israel and Lebanon

How many of the above pairs are correctly matched?

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

Source: <https://www.newsonair.gov.in/rafah-border-crossing-between-gaza-and-egypt-could-reopen-to-increase-humanitarian-efforts/>

2. Mt Roraima

Q. Consider the following statements

- I. It is located in the tri junction of Venezuela, Brazil, and Guyana.
- II. It lies within Canaima National Park.
- III. Of the mountain's total area, a significant part lies in Brazil.

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: (a) I and II only

Explanation:

In NEWS: Venezuela: As the US eyes the Guiana Shield's minerals, can a peak in it which inspired sci-fi remain unscathed?

Mt Roraima:

- Mount Roraima, a striking flat-topped mountain (called a tepui) is located at the **junction of Venezuela, Brazil, and Guyana. Hence statement I is correct.**
- **Of the mountain's total area, about 85 % lies in Venezuela, 10 % in Guyana and 5 % in Brazil. Hence statement III is correct.**
- Mount Roraima is mainly in Venezuela, forming part of the Guiana Shield and the Pakaraima range.
- It lies within **Canaima National Park. Hence statement II is correct.**
- It is part of the ancient Guiana Shield, one of the oldest geological formations on Earth, with rocks nearly two billion years old.
- Mt Roraima's dramatic landscape, towering cliffs, misty plateaus, waterfalls, and many unique endemic species.
- It inspired **Arthur Conan Doyle's 1912 novel The Lost World.**
- Its geology is ancient and remarkable, and the mountain supports endemic plant and animal species found nowhere else.



PYQ REFERENCE:

Q. Where is the volcanic mountain, Mount St. Helens located? [2005]

- (a) Chile
- (b) Japan
- (c) Philippines
- (d) United States of America**

Source:

<https://www.downtoearth.org.in/environment/venezuela-as-the-us-eyes-the-guiana-shields-minerals-can-a-peak-in-it-which-inspired-sci-fi-remain-uncathed>

3. Somaliland

Q. Consider the following statements:

1. Somaliland lies along the Gulf of Aden, near the Bab-el-Mandeb Strait.
2. Somaliland has the direct access between Red Sea and Indian Ocean

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: Somaliland's status and the new geopolitical scramble for Horn of Africa

Somaliland: Status and Geopolitical Significance

- Somaliland is a **self-declared republic** in the **Horn of Africa**.
- It **declared independence from Somalia in 1991** after the collapse of the Somali state.
- It has functioned with:
 - Its own government, constitution, currency and elections
 - Relative **political stability and democratic practices**
- Until recently, it **lacked international recognition**.

Recent Development

- In **December 2025**, **Israel recognised Somaliland's statehood**, making it the **first country** to do so.
- This has triggered a **renewed geopolitical contest** in the **Red Sea-Gulf of Aden corridor**.

Strategically Importance of Somaliland:

1. Strategic Location

- Lies along the **Gulf of Aden**, near the **Bab-el-Mandeb Strait**. **Hence statement 1 is correct.**
- Controls access between:
 - Red Sea and Indian Ocean
 - Europe-Asia trade routes. **Hence statement 2 is correct.**
- One of the world's most critical **maritime chokepoints**.

2. Berbera Port and Airbase

- **Berbera port and airfield** developed by the **UAE since 2016**.
- Capable of hosting:

- Large naval vessels
- Military aircraft
- UAE holds a **25-year concession** for military use.



PYQ REFERENCE: (2022)

Q. Consider the following statements:

1. Bidibidi is a large refugee settlement in north-western Kenya.
2. Some people who fled from South Sudan civil war live in Bidibidi.
3. Some people who fled from civil war in Somalia live in Dadaab refugee complex in Kenya.

Which of the statements given above is/are correct?

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

Source: <https://www.pressreader.com/india/the-hindu-international-9bn2/20260114/282338276264030>

4. Shaksgam Valley

Q. Shaksgam Valley is situated to the

- (a) East of Aksai Chin
- (b) East of Leh
- (c) North of Gilgit
- (d) North of Karakoram Range

Answer: (d) North of Karakoram Range

Explanation:

In NEWS: Amid India's reassertions, recalling how Pakistan ceded Shaksgam Valley to China

Shaksgam Valley:

- **Shaksgam Valley** (also called **Trans-Karakoram Tract**) lies **north of the Karakoram Range**. **Hence option (d) is correct.**
- It is part of the **Union Territory of Ladakh** as per India's claim.
- Currently, it is **under Chinese control**.

Political and Legal Status

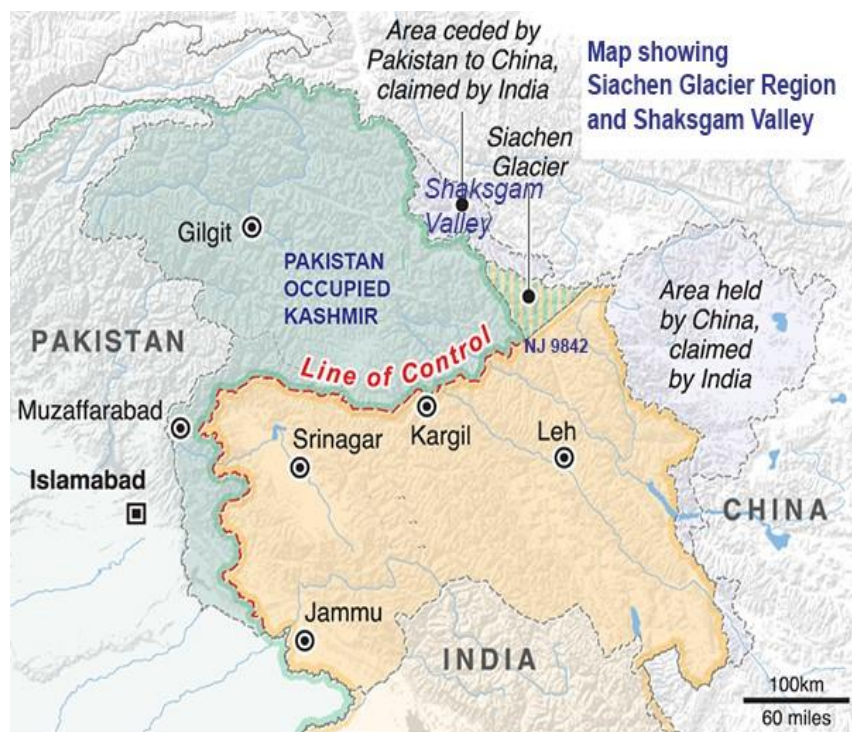
- The valley was **ceded by Pakistan to China in 1963** under the **Sino-Pakistan Boundary Agreement**.
- India **does not recognise this agreement**, as Pakistan had **no legal right** to transfer territory that India considers its own.
- The agreement states that the boundary settlement is **provisional**, pending final resolution of the **Jammu & Kashmir issue**.

Geographical Significance

- Located between:
 - **Karakoram Pass**
 - **Aksai Chin**
- Drained by the **Shaksgam River**, a tributary of the **Yarkand River**.
- Characterised by:
 - High-altitude terrain
 - Glaciers and cold desert conditions

Strategic Importance

- Enhances **China's strategic depth** in the Karakoram region.
- Provides territorial continuity between:
 - Xinjiang (China)
 - Pakistan-occupied territories
- Proximity to:
 - **Siachen Glacier**
 - **Line of Actual Control (LAC)**
- Supports China-Pakistan strategic cooperation, including the **CPEC corridor** in nearby regions.



PYQ REFERENCE: (2020)

Q. Siachen Glacier is situated to the

- (a) East of Aksai Chin
- (b) East of Leh
- (c) North of Gilgit
- (d) North of Nubra Valley**

Source: <https://indianexpress.com/article/explained/pakistan-cede-shaksgam-valley-china-nehru-10471397/>