



KingMakers
IAS Academy

Good Morning Test

(GMT)

Prelims Compilation

August - 2025

KingMakers IAS Academy

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

☎ - 94442 27273 ✉ - kingmakersiasacademy@gmail.com

KingMakers IAS Academy

GOOD MORNING TEST (GMT)

AUGUST 2025

CONTENT

POLITY AND GOVERNANCE.....	5
1. Parliamentary procedures.....	5
2. Special Intensive Revision (SIR)	6
3. Age of consent	7
4. Supreme court ruling on pollution control boards.....	8
5. Judicial review, Judicial activism, and Judicial overreach	9
6. Powers of the Speaker in the removal process of Judges in India.....	10
7. Passage of bills in Parliament.....	11
8. Animal Birth Control Rules, 2001.....	13
9. 'Refugees' and 'illegal entrants'	14
10. Removal of the Chief Election Commissioner (CEC) in India.....	15
11. Nominated members of Union Territories (UT).....	15
12. Toll collection in India.....	16
13. Article 143.....	17
14. Pradhan Mantri Janjati Adivasi Nyaya MahaAbhiyan (PM JANMAN).....	18
15. Filing of Nomination for the Election of Vice-President.....	19
16. Assent of Bills by Governor.....	20
17. OBC Creamy Layer	21
18. Jan Vishwas Bill 2025.....	22
19. Critical Minerals Bill.....	23
20. India's first fully digitally literate state.....	24
21. 130th Constitution Amendment Bill	24
22. National Company Law Appellate Tribunal (NCLAT).....	26
SCHEMES	27
1. Operation Muskaan-XI.....	27
2. Kala Sanskriti Vikas Yojana (KSVY)	28
3. Pradhan Mantri Matru Vandana Yojana	29
4. PAHAL Scheme.....	30
5. Nasha Mukh Bharat Abhiyaan (NMBA)	30
6. NAVYA INITIATIVE	31
7. NAMASTE Scheme	32
8. 'One Nation, One Subscription' (ONOS).....	33
SCIENCE & TECHNOLOGY	33
1. Leap-1 Mission.....	33
2. Solar PV Module.....	34
3. SabhaSaar.....	35
4. Mission Sudarshan Chakra	36

5. e-Jagriti platform.....	36
6. Rubella Elimination.....	37
7. Entangled clocks.....	38
8. Agni-5.....	39
9. National Supercomputing Mission.....	40
10. Deuterium.....	41
11. National Space Day 2025.....	41
12. Sustainable Power 1404' exercise.....	42
13. Gaganyaan mission.....	43
14. Integrated Air Defence Weapon System (IADWS).....	44
15. Bloom Syndrome.....	45
16. INS Udaygiri and INS Himgiri.....	46
ENVIRONMENT AND AGRICULTURE.....	47
1. Matri Van.....	47
2. Bio-fortified potatoes.....	47
3. Alpine Musk Deer.....	48
4. Ashtamudi Wetland.....	49
5. "World Seeds" experiment.....	50
6. Asian giant tortoise.....	51
7. Blue Carbon.....	51
8. Red Panda.....	52
9. Minimum Support Price (MSP).....	53
10. India-Brazil Biofuels Alliance.....	54
11. Rhisotope Project.....	55
12. Biochar.....	56
13. Microplastics.....	57
14. Closed Fuel Cycle Technology.....	57
15. Mahanadi water dispute.....	58
16. Great Barrier Reef.....	59
17. Asiatic Lion.....	60
18. Algal Bloom.....	61
19. Nilgiri Tahr.....	62
20. Geneva Plastics Treaty negotiations.....	63
21. Kaleshwaram Lift Irrigation Project.....	64
22. Fishing Cat.....	64
23. Environment Protection (Management of Contaminated Sites) Rules, 2025.....	65
24. Star Fish.....	66
25. World Elephant Day 2025.....	67
26. Equator Initiative Award 2025.....	67
27. Globally Important Agricultural Heritage Systems (GIAHS).....	68
28. Saltwater crocodile.....	69
29. Jelly Fish.....	70
30. The National River Conservation Plan (NRCP).....	71

31. Royal Bengal tiger	72
32. 7 species of Big cats.....	73
33. Arogyapacha.....	74
ECONOMY.....	75
1. Banking Laws (Amendment) Act, 2025.....	75
2. Money Laundering.....	76
3. Tariff on Indian imports.....	77
4. The Monetary Policy Committee (MPC)	78
5. Uranium Oxide	78
6. M S Swaminathan.....	79
7. Retail inflation	80
8. Soybean production in the world	80
9. Small Finance Bank.....	81
10. Pradhan Mantri Viksit Bharat Rozgar Yojana	82
11. GST (Goods and Services Tax).....	83
12. Diamond Industry in India.....	84
13. The Employees Provident Fund Organisation (EPFO).....	85
14. SEMICON India 2025	85
15. The Central Board of Direct Taxes (CBDT).....	86
16. Cotton production in India.....	87
INTERNATIONAL RELATIONS.....	88
1. India-UN Global Capacity Building Initiative.....	88
2. BIMSTEC.....	88
3. India - Philippines.....	89
4. North Atlantic Treaty Organization (NATO)	90
5. Chenab Bridge	91
6. ASEAN	92
8. The National Organ and Tissue Transplant Organisation (NOTTO).....	94
9. Operation Sindoor	95
10. India-Singapore Relations.....	95
11. SLINEX.....	96
12. West Bank.....	97
13. India-Japan Relations	98
14. Super Garuda Shield exercise 2025	99
GEOGRAPHY & MAPS	100
1. Colorado River.....	100
2. Easter Island.....	100
3. Southwest monsoon	101
4. Plate tectonic movements	102
5. Salal Dam	103
6. Atlantic meridional overturning circulation (AMOC).....	104
7. Godavari river.....	105
8. Lipulekh Pass.....	106

9. Jute.....	106
10. Kilauea volcano	107
11. Cherrapunji	108
12. Shipki-La Pass.....	108
ART AND CULTURE.....	109
1. Pingali Venkayya	109
2. Arya Samaj	110
3. Sarnath.....	111
4. Quit India Movement.....	111
7. National Handloom Day 2025	114
8. Mudhuvan Tribe	114
9. Sri Aurobindo.....	115
10. India's freedom struggle through the writings.....	116
11. Gugga Naumi festival	116
12. The Sarvottam Yudh Seva Medals (SYSM).....	117
13. Palmyra.....	118
14. Vithalbhai Patel	118

KingMakers IAS Academy

POLITY AND GOVERNANCE

1. Parliamentary procedures

1. Consider the following pairs:

Type of parliamentary breaks	Description
Adjournment for the Day	happens at the end of the day's sitting.
Adjournment Sine Die	to draw attention to an urgent or important matter
Prorogation	adjournment without a fixed date for resumption
Adjournment Motion	marks the end of a parliamentary session

How many of the above pairs are correctly matched?

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

Answer: (a) Only one

Explanation:

In NEWS: Rajya Sabha adjourned till 2 p.m. after heated Opposition protests over using CISF personnel inside the House

Adjournment:

- The adjournment of Parliament refers to the formal suspension or closure of parliamentary proceedings for a specified period of time.
- This usually occurs at the **end of a sitting day, session**, or before the start of a **recess**.
- The adjournment can be temporary (e.g., until the next day or week) or for longer periods, such as during annual or seasonal breaks.
- In India, the adjournment of Parliament is **governed by the Rules of Procedure of the respective Houses of Parliament**.
- While the **constitution does not explicitly mention adjournment**, the power to adjourn individual sittings is vested in the **presiding officers** (Speaker for Lok Sabha and Chairman for Rajya Sabha).

Types of adjournment in India:

1. Adjournment for the Day (Routine Adjournment):

- This is the most common and basic type of adjournment. It happens at the end of the day's sitting.

Hence pair 1 is correct.

- This is used to suspend the proceedings of the House until the next sitting day.
- This is a temporary adjournment that happens at the conclusion of a regular day's business.

2. Adjournment Sine Die:

- This is an adjournment without a fixed date for resumption. **Hence pair 2 is incorrect.**
- It usually marks the end of a session of Parliament, after which the House is not scheduled to meet again until the next session begins.

3. Adjournment for a Short Duration:

- Sometimes, the House may adjourn temporarily during a sitting.
- This type of adjournment occurs when the House needs a break (e.g., lunch break, tea break, etc.) or when there is some other need to suspend proceedings briefly.

4. Adjournment Motion:

- This is a motion moved by a Member of Parliament (MP) or Member of the Rajya Sabha to temporarily halt the ongoing proceedings of the House.
- To draw attention to an urgent or important matter that requires the immediate focus of the House, often in response to a pressing issue or emergency. **Hence pair 4 is incorrect.**
- It is sometimes used by the opposition to halt legislative proceedings.
- The motion is subject to the **approval of the Speaker (Lok Sabha) or Chairman (Rajya Sabha)**, and if accepted, it may halt the proceedings for a short time to discuss the issue raised.

5. Adjournment for Recess or Break:

- Sometimes, Parliament is adjourned for a longer period during specific breaks or recesses.
- These breaks are scheduled in advance and are typically linked to holidays or non-sitting periods, like summer recess, Christmas break, or festival periods.
- This is done according to the parliamentary calendar, which is usually decided at the beginning of a session.

6. Prorogation (Formal Suspension):

- Article 85 of the Constitution of India gives the President of India the authority to prorogue Parliament and dissolve the Lok Sabha.
- Although not technically an "adjournment" in the parliamentary procedural sense, prorogation is a form of formal suspension of Parliament by the President of India.
- To **mark the end of a parliamentary session**, and this adjournment brings an end to all ongoing business. It is usually done before the beginning of a new session.

Hence pair 3 is incorrect.

- The President of India prorogues Parliament on the advice of the Prime Minister.

PYQ REFERENCE:

Q. In the Parliament of India, the purpose of an adjournment motion is

(a) to allow a discussion on a definite matter of urgent public importance

(b) to let opposition members collect information from the ministers

(c) to allow a reduction of specific amount in demand for grant

(d) to postpone the proceedings to check the inappropriate or violent behaviour on the part of some members

Source:

<https://www.thehindu.com/news/national/parliament-monsoon-session-lok-sabha-rajya-sabha-day-12-live-updates-august-5-2025/article69895976.ece>

2. Special Intensive Revision (SIR)

2. Consider the following statements with respect to the the Representation of the People Act, 1950:

1. The Election Commission of India prepares the electoral rolls as per the provisions of the act.
2. Section 20 of the act defines the term “ordinarily resident”.
3. Section 20A allows Non-Resident Indians (NRIs) to register and vote in the constituency where their passport address is located.

Which of the statements given above are correct?

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: ECI to begin Special Intensive Revision of Electoral Rolls in Bihar

Special Intensive Revision (SIR):

- The Election Commission of India (ECI) has initiated a Special Intensive Revision (SIR) of the electoral rolls in Bihar before the general elections for its legislative assembly.
- The SIR would involve a thorough revision of the electoral roll from scratch by the ECI.

- The exercise commenced on 25 June 2025 with the distribution of enumeration forms to all the 8 crore voters in the electoral roll of Bihar. It will conclude with the publication of the revised final electoral roll by September 30, 2025.

Reason for the Revision:

- Ensure all eligible citizens are included in the electoral roll.
- Remove ineligible voters (like those who have passed away, shifted, or are absentee voters).
- Issues like rapid urbanization, migration, young citizens turning 18, non-reporting of deaths, and inclusion of foreign illegal immigrants have made it necessary to conduct this revision.
- Integrity of the electoral roll must be maintained for the smooth conduct of elections.

Key Provisions Related to the Electoral Roll in the Indian Constitution and Laws:

- **Article 324 of the Constitution:** The superintendence, direction, and control of the preparation of electoral rolls for elections to the Parliament and State Legislatures lies with the Election Commission of India (ECI).
- **Article 326 of the Constitution:** It provides that every citizen who is at least 18 years of age on the qualifying date is entitled to be registered as a voter (elector). This ensures that all eligible Indian citizens can participate in elections.
- **The Representation of the People Act, 1950 (RP Act):** The ECI prepares the electoral rolls as per the provisions of the RP Act, 1950. It lays out the rules regarding eligibility and disqualification for being included in the electoral rolls. **Hence statement 1 is correct.**

Eligibility and Disqualifications for Registration:

- **Section 16 of the RP Act:** Specifies that non-citizens cannot be registered as voters.
- **Section 19:** Specifies the eligibility criteria for voter registration:
 - Minimum age of 18 years on the qualifying date (1st January, April, July, or October).
 - Must be an ordinary resident of the constituency.
- **Section 20 of the RP Act:** Defines the term “ordinarily resident” to ensure that a person is not just registered in a constituency because they own a house there. It also allows for people temporarily absent (like government employees or military personnel) to remain “ordinarily resident” in their original constituency. **Hence statement 2 is correct.**
- **Section 20A (added in 2010):** Allows Non-Resident Indians (NRIs) to register and vote in the constituency where their passport address is located. **Hence statement 3 is correct.**

Process of the Revision:

- Pre-filled Enumeration Forms (EF) will be provided to existing electors and distributed by Booth Level Officers (BLOs) during their house-to-house visits.
- Electors can also download the EF from the ECI website.
- Political parties will be encouraged to actively participate, with each party appointing Booth Level Agents (BLAs) to monitor the process at polling booths.
- BLOs will guide the public on filling out the forms, collect the forms along with supporting documents, and ensure smooth participation from vulnerable groups, such as persons with disabilities (PwD), elderly, and poor citizens.

PYQ REFERENCE:

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/lok-sabha-adjourned-for-the-day-as-opposition-protests-over-bihar-sir-continue/article69892872.ece>
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2139342>

3. Age of consent

3. Consider the following statements with respect to the age of consent in India:

1. Under the Protection of Children from Sexual Offences (POCSO) Act, 2012, and Section 375 of the Indian Penal Code, the age of consent is 16 years.
2. The age of consent was 14, until increased to 16 in 2013 by the Criminal Law (Amendment) Act.

Which of the statements given above is/are incorrect?

- (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: Bring down age of consent from 18 to 16 years, Supreme Court told

Age of Consent Under POCSO Act:

Current Legal Framework:

- The age of consent is the legal minimum age at which a person is considered capable of **legally consenting to sexual activity**.

POCSO Act, 2012

- Protects children (**<18 years**) from sexual offences. **Hence statement 1 is incorrect.**
- Criminalises all sexual acts involving minors, even consensual ones.
- No "**close-in-age**" exception exists in the law.

Indian Penal Code (IPC) – Section 375 (Rape)

- Defines rape and includes that sexual intercourse with a girl **under 18**, with or without consent, is rape.

Arguments for bringing down Age of Consent from 18 to 16:

- **Jaisingh** urged the Supreme Court to allow consensual sexual activity between adolescents aged 16 to 18, by reading a "close-in-age" exception into POCSO.
- **Current law** criminalises romantic and consensual relationships between adolescents.
 - This ignores their autonomy, maturity, and right to privacy.
- **Justice Verma Committee** recommends to retain the age at 16.
 - Adolescents attain puberty earlier and are capable of making informed sexual choices.
- **National Family Health Survey (NFHS)** data shows that teenage sexual activity is not uncommon.
 - Between 2017 and 2021, there was a **180% rise** in POCSO prosecutions involving adolescents aged 16–18.
 - Most cases are filed by parents, often due to **inter-caste or inter-faith relationships**, even against the wishes of the girl.
- Criminalising consensual sex violates fundamental rights under **Articles 14, 15, 19, and 21 of the Constitution**.
- The age of consent was 16 for over 70 years, until increased to 18 in 2013 by the **Criminal Law (Amendment) Act**. **Hence statement 2 is incorrect.**

Arguments Against Reducing the Age of Consent from 18 to 16:

- Adolescents (even at 16) are **vulnerable to coercion, manipulation, and exploitation**.
- The POCSO Act was designed with the assumption that minors (under 18) lack the emotional, psychological, and legal maturity to give valid consent for sexual activity.

- Lowering the age could weaken the legal shield meant to protect all minors equally.
- Indian society still faces issues such as: **Gender inequality, Honor-based violence, Child marriage.** Lowering the age of consent could exacerbate these issues, particularly in rural or conservative areas.
- Scientific studies suggest that the **prefrontal cortex**, responsible for decision-making and risk assessment, is still developing in teenagers.
- Claiming consent in genuine cases of **abuse or trafficking**, making prosecution more difficult.
- Contradiction with Other Legal Provisions: Indian laws set **18** as the age of **majority for Voting, Marriage (for girls), Driving and Legal contracts**
- Teenage girls are often the ones who suffer the consequences — including **unplanned pregnancies, unsafe abortions, social stigma, and dropout from education.**
- The Law Commission has clearly opposed reducing the age of consent. It emphasizes the need for caution in changing laws that protect children and uphold their best interests.

PYQ REFERENCE:

Q. In the context of Indian history, the Rakhmabai case of 1884 revolved around

1. women's right to gain education
2. age of consent
3. restitution of conjugal rights

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.thehindu.com/news/national/bring-down-age-of-consent-from-18-to-16-years-supreme-court-told/article69850501.ece>

4. Supreme court ruling on pollution control boards

4. Consider the following statements:

Statement-I: The Supreme Court ruled that Pollution Control Boards (both Central and State) can Impose and collect restitutionary and compensatory damages for environmental harm.

Statement-II: Section 33A of Water (Prevention and Control of Pollution) Act, 1974 gives the State Pollution Control Boards the power to issue directions in writing to Stop, regulate, or control any industry, operation, or process.

Statement III: Section 31A of Air (Prevention and Control of Pollution) Act, 1981 empowers State Pollution Control Boards to issue written directions to regulate or prohibit any industry, operation, or process contributing to air pollution.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (a) Both Statement II and Statement III are correct and both of them explain Statement I

In NEWS: Pollution Control Boards have power to impose restitutionary damages under Water, Air Acts, says Supreme Court

Supreme Court judgment (August 4, 2025) reemphasized the powers of Pollution Control Boards in India:

- The ruling came in response to an appeal by the Delhi Pollution Control Committee (DPCC).
- The Supreme Court ruled that Pollution Control Boards (both Central and State) can:
 - Impose and collect restitutionary and compensatory damages for environmental harm.
 - Require bank guarantees as a preventive (ex-ante) measure against possible future pollution.
- Powers are derived from Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981.
- The judgment emphasized “remedial jurisprudence”, meaning:
 - It's not enough to expand fundamental rights (like the right to a clean environment).
 - The remedies - legal actions that follow rights violations must also be strong and effective.
- The Court clarified the distinction between:
 - **Punitive damages** (penalties for wrongdoing) and
 - **Restitutionary damages** (payments meant to restore the environment to its original state).

“The responsibility for repairing the damage is that of the offending industry... Restoration must be as close and similar as possible to the original ecosystem.”

— Justice P.S. Narasimha

Section 33A – Water (Prevention and Control of Pollution) Act, 1974

- Section 33A gives the State Pollution Control Boards the power to issue directions in writing to any person, officer, or authority to:
 - Stop, regulate, or control any industry, operation, or process.
 - Prohibit discharge of pollutants into water sources.
 - Close industries, or
 - Stop or regulate the supply of electricity, water, or any other service.

Section 31A – Air (Prevention and Control of Pollution) Act, 1981

- Section 31A empowers State Pollution Control Boards to issue written directions to:
 - Regulate or prohibit any industry, operation, or process contributing to air pollution.
 - Close industries violating air pollution standards.
 - Stop or regulate services like electricity and water supply to polluting units.

PYQ REFERENCE:

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.thehindu.com/news/national/pollution-control-boards-have-power-to-impose-restitutionary-damages-under-water-air-acts-says-supreme-court/article69894296.ece>

5. Judicial review, Judicial activism, and Judicial overreach

5. Consider the following pairs:

S. no	Term	Description
1.	Judicial review	Judiciary proactively interpret the law and Constitution in the absence or failure of action by the legislature or executive
2.	Judicial activism	Judiciary check whether the laws and executive actions are constitutional
3.	Judicial overreach	Judiciary crosses its constitutional limits and interferes in the domains of the legislature or executive, essentially making or enforcing laws

How many of the above pairs are correctly matched?

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

Answer: (a) Only one

Explanation:

In NEWS: The Supreme Court's remarks on Rahul Gandhi threaten democratic dissent

Judicial Review

- Judicial review is the power of the judiciary to review laws and executive actions to determine whether they are constitutional. **Hence pair 1 is incorrect.**

Source in India:

- Articles 13, 32, 226 of the Constitution
- Evolved through cases like Kesavananda Bharati v. State of Kerala (1973)

Purpose:

- To protect the Constitution's supremacy
- To strike down any law or order that violates Fundamental Rights or the Basic Structure

Example:

- Minerva Mills v. Union of India (1980): The Supreme Court struck down amendments to preserve the Constitution's Basic Structure.

2. Judicial Activism

- Judicial activism is when courts proactively interpret the law and Constitution to address social and political issues, especially in the absence or failure of action by the legislature or executive. **Hence pair 2 is incorrect.**

Features:

- Often exercised through Public Interest Litigation (PIL)

- Focuses on social justice, environmental protection, or human rights

- Expands the scope of Fundamental Rights

Purpose:

- To fill legislative or executive gaps

- Ensure accountability and justice when other institutions fail

Example:

- Vishaka v. State of Rajasthan (1997): SC created guidelines on sexual harassment at the workplace due to lack of law.

3. Judicial Overreach

- Judicial overreach occurs when the judiciary crosses its constitutional limits and interferes in the domains of the legislature or executive, essentially making or enforcing laws. **Hence pair 3 is correct.**

Features:

- Seen as undemocratic and a violation of separation of powers

- Goes beyond interpretation into policy-making

Example:

- Ban on liquor shops near highways (2016): The SC dictated policy affecting state revenue and governance.

- Order on national anthem in cinema halls (2016): Viewed as moral policing rather than judicial interpretation.

PYQ REFERENCE:

Q. In India, Judicial Review implies

(a) the power of the Judiciary to pronounce upon the constitutionality of laws and executive orders.

(b) the power of the Judiciary to question the wisdom of the laws enacted by the Legislatures.

(c) the power of the Judiciary to review all the legislative enactments before they are assented to by the President.

(d) the power of the Judiciary to review its own judgements given earlier in similar or different cases.

Source:

<https://www.thehindu.com/opinion/editorial/judicial-overreach-on-the-top-court-and-democratic-dissent/article69902142.ece>

6. Powers of the Speaker in the removal process of Judges in India

6. With reference to the powers of the speaker in the removal process of Judges in India, consider the following statements:

1. When the parliament passes the removal motion of a Judge in India, the speaker has the discretionary power either to admit or refuse the motion.

2. It is obligatory for the speaker to give reasons for rejection of removal motion of a Judge in India.

3. If a removal motion is admitted, the Speaker must constitute a 3-member Inquiry Committee.

4. If the committee finds the judge guilty, the Speaker schedules the motion for discussion and voting in the House.

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: (b) 1, 3 and 4 only

Explanation:

In NEWS: LS Speaker sets in motion process to remove HC judge

Background:

- On 14 March 2025, burnt wads of currency notes were found at Justice Varma's official residence (then in Delhi HC).

- On 21 July 2025, 146 Lok Sabha MPs submitted a motion for removal.

- Speaker Om Birla admitted the motion on 12 August 2025.

Legal Basis:

- Articles: 124, 217, 218 – address removal of judges of SC & HCs.

- Judges (Inquiry) Act, 1968 – Section 3(2) procedure for inquiry committee.

Powers of the Speaker in the removal process of Supreme court and High court Judges in India:

Receipt of Motion:

- Motion for removal of a judge (SC or HC) can be moved in either House of Parliament.

- In Lok Sabha → Submitted to the Speaker.

- In Rajya Sabha → Submitted to Chairman (Vice-President).

Admitting or Rejecting the Motion:

- Discretionary Power – Speaker may:
 - Admit the motion, or
 - Refuse to admit it (if it is frivolous, vexatious, or not in proper form). **Hence statement 1 is correct.**
- No obligation to give reasons for rejection (though usually recorded for transparency). **Hence statement 2 is incorrect.**

Constitution of Inquiry Committee:

- If admitted, Speaker must constitute a 3-member Inquiry Committee under Section 3(2) of the Judges (Inquiry) Act, 1968:
 - One Supreme Court judge,
 - One Chief Justice of a High Court,
 - One distinguished jurist. **Hence statement 3 is correct.**

Forwarding the Motion:

- Once admitted, Speaker formally forwards:
 - The motion,
 - Names of committee members, and
 - Relevant supporting material.

Role After Committee Report:

- If the committee finds the judge guilty:
 - The Speaker schedules the motion for discussion and voting in the House. **Hence statement 4 is correct.**
- If the committee finds judge not guilty:
 - Process ends; motion lapses, Speaker plays no further role.

Procedural & Administrative Role:

- Ensures motion is in proper format (correct number of signatures: 100 LS members or 50 RS members).
- Ensures compliance with constitutional provisions (Art. 124(4), 217, 218) and Judges (Inquiry) Act.
- Fixes dates for discussion & voting if motion proceeds.

Constitutional provisions:

Article 217(1)(b) – Tenure:

- A High Court judge holds office until the age of 62 years.
- Can be removed only by the President in the manner provided in Article 124(4) & (5).

Article 124(4) – Grounds for Removal:

- Judge can be removed only on the grounds of:
 - Proved misbehaviour
 - Incapacity
- Removal requires:
 - An address by each House of Parliament
- Supported by a special majority:
 - Majority of the total membership of that House, and
 - Majority of not less than two-thirds of members present and voting.

Article 124(5) – Parliament to regulate procedure:

- Parliament has enacted the Judges (Inquiry) Act, 1968 for this purpose.

Article 218 – Application to High Court Judges:

- Provisions for removal of a Supreme Court judge (Art. 124) apply to High Court judges as well.

PYQ REFERENCE:

Q. Consider the following statements:

1. The motion to impeach a Judge of the Supreme Court of India cannot be rejected by the Speaker of the Lok Sabha as per the Judges (Inquiry) Act 1968.
2. The Constitution of India defines and gives details or what constitutes ‘incapacity and proved misbehaviour’ of the Judges of the Supreme Court of India.
3. The details of the process of impeachment of the Judges of the Supreme Court of India are given in 4 the Judges (Inquiry) Act, 1968.
4. If the motion for the impeachment of a Judge is taken up for voting, the law requires the motion to be backed by each House of the Parliament and supported by a majority of total membership of that House and by not less than two-thirds of total members of that House present and voting.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/news/national/justice-yashwant-varma-cash-row-lok-sabha-speaker-announces-three-member-enquiry-panel/article69923153.ece>

7. Passage of bills in Parliament

7. With reference to the bill passing procedure in the parliament of India, consider the following statements:

1. A motion for leave to introduce the Bill is moved and adopted.
2. The Bill be referred to a Select Committee of the House
3. The House debates and votes on the motion that the Bill be passed.
4. General discussion on the principles and main provisions of the Bill.
5. Sent to the President for assent.

Arrange the stages of the passage of a Bill in the correct order:

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

Answer: (a) 1 → 4 → 2 → 3 → 5

Explanation:

In NEWS: New Income Tax Bill 2025 passed in Parliament:

Passage of bills in Parliament - How Bill becomes an Act?

Step 1: Introduction (First Reading)

- A Bill is introduced in either House of Parliament (Lok Sabha or Rajya Sabha).
- For a Bill introduced in a House, a motion for leave to introduce the Bill is moved and adopted.
- If the Bill has already been passed by the other House, it is laid on the Table of the House.

Step 2: Consideration (Second Reading)

The Second Reading has two stages:

Stage 1:

- General discussion on the principles and main provisions of the Bill.
- Possible motions include:
 - That the Bill be taken into consideration, OR
 - That the Bill be referred to a Select Committee of the House, OR
 - That the Bill be referred to a Joint Committee of both Houses (with consent), OR
 - That the Bill be circulated for public opinion.

Stage 2:

- Detailed clause-by-clause consideration of the Bill.
- Amendments may be proposed and voted upon.
- This can happen either in the House or through the Committee's report.

Step 3: Passing the Bill in the House

- After the clause-by-clause consideration, the Bill (as amended if any) is finalized in that House.

Step 4: Transmission to the Other House

- The Bill passed by one House is sent to the other House.
- The other House follows the same stages:
 - First Reading (laying on Table)
 - Second Reading (consideration and detailed discussion)
 - Third Reading (final passing)

Step 5: Third Reading (Final Passage)

- The House debates and votes on the motion that the Bill (or the Bill as amended) be passed.
- If the Bill is passed, it moves forward.

Step 6: Presidential Assent

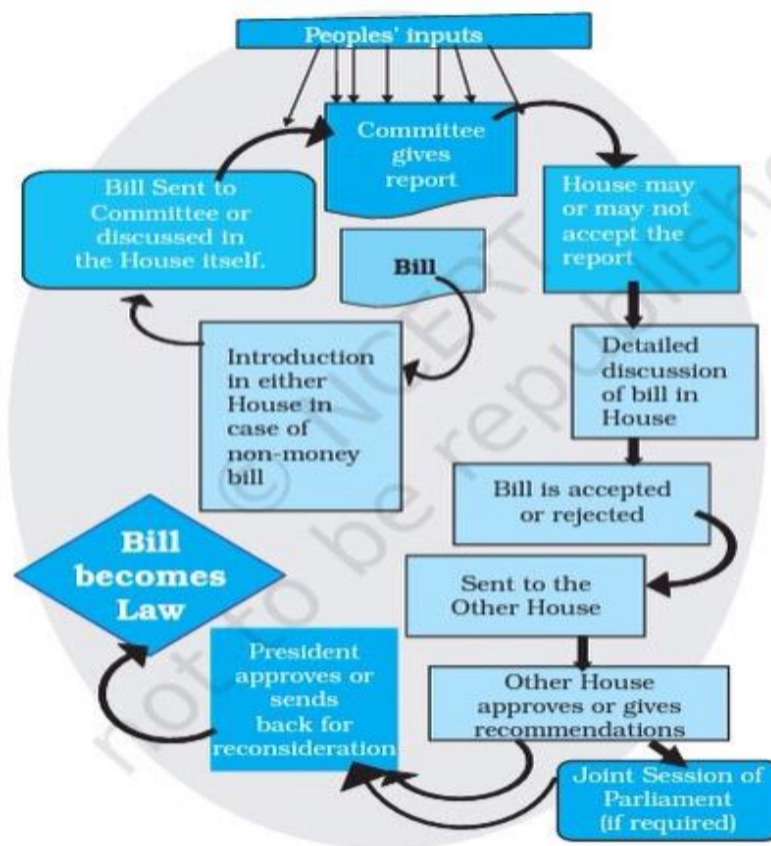
- Once both Houses pass the Bill, it is sent to the President for assent.
- The President may:
 - Give assent (Bill becomes law), OR

- Withhold assent, OR
- Return the Bill (if not a Money Bill) for reconsideration.

Step 7: Becoming an Act

- After the President's assent, the Bill becomes an Act of Parliament — the law of the land.

Hence option (a) is correct.



PYQ REFERENCE:

Q. Consider the following statements:

1. A bill amending the Constitution requires a prior recommendation of the President of India.
2. When a Constitution Amendment Bill is presented to the President of India, it is obligatory for the President of India to give his/her assent.
3. A Constitution Amendment Bill must be passed by both the Lok Sabha and the Rajya Sabha by a special majority and there is no provision for joint sitting.

Which of the statements given above are correct?

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

Source:

https://indianexpress.com/article/explained/explained-economics/new-income-tax-bill-passed-in-parliament-key-features-10186767/?ref=explained_pg

8. Animal Birth Control Rules, 2001

8. Consider the following statements with respect to the Animal Birth Control (ABC) Rules, 2001:

- I. The Animal Birth Control (ABC) Rules, 2001, were enacted under the powers of the Prevention of Cruelty to Animals Act, 1960.
- II. The primary objective is to control the population of stray dogs through euthanasia.
- III. The municipalities and local bodies are required to implement the Animal Birth Control program and appoint authorized agencies or organizations to carry out sterilization and vaccination.

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: Three-judge SC Bench to hear case on community dogs in Delhi today

Animal Birth Control Rules, 2001:

- The Animal Birth Control (ABC) Rules, 2001, were enacted under the powers of the Prevention of Cruelty to Animals Act, 1960 to address the overpopulation of street dogs (stray dogs) and reduce human-animal conflict in a humane way. **Hence statement 1 is correct.**
- The primary objective is to control the population of stray dogs through a humane method, using sterilization and vaccination without resorting to euthanasia or cruel methods. **Hence statement 2 is incorrect.**
- Sterilization is the process of surgically removing the reproductive organs of animals, and vaccination against rabies is carried out during the process.
- The sterilization process is done in such a way that the dog is safely returned to its original location after treatment.
- This process ensures the reduction of street dog populations over time, while also controlling the spread of rabies.
- The ABC Rules mandate that all activities should be carried out in a humane manner and without causing pain or suffering to the animals.
- Stray dogs that are caught for sterilization should not be cruelly confined or mistreated.
- Shelters and kennels used for holding dogs should meet certain minimum standards of care, including cleanliness and proper facilities.

- The ABC Rules also require authorities to keep track of the number of dogs sterilized and vaccinated and periodically report progress to the central government.
- The ABC Rules emphasize community participation in the management of stray dog populations. Local residents, animal lovers, and NGOs can play an active role in ensuring the success of the program.
- The Rules make it clear that euthanasia of stray dogs should only be carried out in cases of severe illness or suffering and not for population control.

Role of Municipalities & Local Authorities:

- The municipalities and local bodies are required to implement the Animal Birth Control program and appoint authorized agencies or organizations to carry out sterilization and vaccination. **Hence statement 3 is correct.**
- They are also tasked with ensuring that the dogs are not subjected to abuse during the sterilization process.

Prevention of Cruelty to Animals Act, 1960:

- The Prevention of Cruelty to Animals Act, 1960 (PCA Act) is a key piece of legislation in India aimed at preventing the infliction of unnecessary pain or suffering on animals.
- It is one of the primary legal frameworks that protect the rights of animals and establish guidelines for their humane treatment.
- Definition of "Animal": The Act defines an animal as any living being, other than a human, that has the capacity to feel pain. This broad definition helps ensure the protection of a variety of species.
- The Act established the Animal Welfare Board of India (AWBI) to promote animal welfare and coordinate efforts to ensure animals' rights are respected.
- The Board also advises the government on issues relating to animal welfare, drafts rules, and ensures their implementation.
- The Act regulates the use of animals in experiments for scientific and medical purposes.
- It requires institutions to obtain licenses for experiments, ensuring that animals are treated humanely and that the experiments are for legitimate scientific purposes.
- The Act lays down guidelines and restrictions on the culling of animals, specifically in the context of diseases or animal population control.
- The Act imposes penalties for those found guilty of animal cruelty.

Cruelty to Animals:

- The Act outlines several actions that are considered cruel and prohibited, such as:
 - Beating, kicking, overriding, over-driving, and torturing animals.

- Mutilating or poisoning animals.
- Keeping animals in inhumane conditions, including neglecting their basic needs.
- Forcing animals into unnatural work, such as using them in circuses or performing arts, causing them distress.

PYQ REFERENCE:

Q. With reference to Indian laws about wildlife protection, consider the following statements:

1. Wild animals are the sole property of the government.
2. When a wild animal is declared protected, such animal is entitled for equal protection whether it is found in protected areas or outside.
3. Apprehension of a protected wild animal becoming a danger to human life is sufficient ground for its capture or killing.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/news/national/cji-agrees-to-consider-listing-stray-dog-issue-after-petitioner-unearths-2024-sc-order-to-treat-animals-with-compassion/article69927419.ece>

9. 'Refugees' and 'illegal entrants'

9. Consider the following statements regarding 'Refugees' in India:

1. The Citizenship Act, 1955, provides a legal definition of a "refugee" in India.
2. India is not a signatory to the 1951 UN Convention on the Status of Refugees.
3. The 1951 UN Convention defines a refugee as a person fleeing their country due to a well-founded fear of persecution.

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: (b) 2 and 3 only

Explanation:

In NEWS: The Supreme Court will soon decide whether the Rohingya in India are entitled to be declared as 'refugees' or whether they are 'illegal entrants'.

'Refugees' as per the existing Indian law:

● A large number of refugees from Sri Lanka, Tibet, Myanmar and Afghanistan – at least 2,09,028, according to a report by the National Human Rights Commission published in July 2024 – live in India. However, in India, while the Citizenship Act, 1955, defines an "illegal immigrant", there is **no definition of a "refugee"**. **Hence statement 1 is incorrect.**

● On a global level, the United Nations Convention on the Status of Refugees (1951) defines refugees as people who have been forced to flee their country of origin and are unable or unwilling to return due to a "well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion". **Hence statement 3 is correct.**

● The UN Convention also lays down the obligations of states to protect refugees and grant them a minimum standard of care. The convention has been signed and ratified by 149 UN member states. However, India is one of the 44 UN member states that is not a signatory to the UN refugee treaty. **Hence statement 2 is correct.**

● There is no national refugee law in India, which means that India does not legally recognise refugees or distinguish between refugees and other foreign nationals entering Indian territory.

Illegal immigrants:

● The Citizenship Act, 1955, defines an illegal immigrant as a foreigner who enters India without valid travel documents or who stays in India beyond the expiry of the documents. Such a person is ineligible to apply for citizenship of India.

● The Citizenship (Amendment) Act of 2019 excluded Hindu, Sikh, Buddhist, Jain, Parsi, and Christian persons from Afghanistan, Bangladesh, and Pakistan from the definition of "illegal migrants" if they entered India on or before December 31, 2014.

● As per this definition, Rohingya are illegal migrants and cannot apply for Indian citizenship.

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-refugees-illegal-immigrants-india-rohingya-upsc-10186365/>

10. Removal of the Chief Election Commissioner (CEC) in India

10. With reference to the removal procedure of the Chief Election Commissioner (CEC) in India, consider the following statements:

1. The CEC can only be removed from office in the same manner and on the same grounds as a Judge of the Supreme Court of India.
2. The constitution of India laid down the process for the removal of the Chief Election Commissioner.
3. Other Election Commissioners or a Regional Commissioner shall not be removed from office except on the recommendation of the Prime Minister with the council of ministers.

Which of the statements given above are correct?

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

Answer: (b) 1 and 2 only

Explanation:

In NEWS: INDIA bloc considers moving a motion seeking removal of CEC

Removal of the Chief Election Commissioner (CEC) in India:

- The process for the removal of the Chief Election Commissioner is laid down in **Article 324(5)** of the Indian Constitution. **Hence statement 2 is correct.**
 - Subject to the provisions of any law made by Parliament, the conditions of service and tenure of office of the Election Commissioners and the Regional Commissioners shall be such as the President may by rule determine:
 - Provided that the Chief Election Commissioner shall not be removed from his office except in like manner and on the like grounds as a Judge of the Supreme Court and the conditions of service of the Chief Election Commissioner shall not be varied to his disadvantage after his appointment:
 - Provided further that any other Election Commissioner or a Regional Commissioner shall not be removed from office except on the recommendation of the **Chief Election Commissioner. Hence statement 3 is incorrect.**

Same process as a Supreme Court judge:

- The CEC can only be removed from office in the same manner and on the same grounds as a Judge of the Supreme Court of India. **Hence statement 1 is correct.**

Grounds for removal: Proven misbehavior or incapacity.

Process of removal:

- Requires a special majority of both Houses of Parliament:
 - A majority of the total membership of the House, and
 - A two-thirds majority of the members present and vote.
- After this, the President of India can order the removal.

Source:

<https://www.thehindu.com/news/national/india-bloc-considering-motion-to-remove-chief-election-commissioner-gyanesh-kumar-august-18-2025/article69946271.ece#:~:text=The%20INDIA%20bloc%20is%20considering%20a%20motion%20aga inst.Parliamentary%20floor%20leaders%20on%20Monday%20%28August%2018%2C%202025%29.>

11. Nominated members of Union Territories (UT)

11. Consider the following statements:

1. The President of India has the power to nominate up to three members to the Puducherry Legislative Assembly, under the constitution of India.
2. The nominations of members to the Puducherry Legislative Assembly require consultation with the Government of Puducherry or the Chief Minister.
3. All nominated members in J&K are granted full voting rights, including participation in government formation processes.
4. Delhi has a legislative assembly, but there are no provisions for nominated MLAs.

Which of the statements given above are correct?

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

Answer: (c) 3 and 4 only

Explanation:

In NEWS: The Union Home Ministry, in its affidavit before the Jammu & Kashmir and Ladakh High Court, has submitted that the power of the Lieutenant Governor (LG) of Jammu & Kashmir (J&K) to nominate five members to the Legislative Assembly of J&K can be exercised by him without the aid and advice of its Council of Ministers.

Nomination Powers in UT Legislatures

1. Puducherry

● Authority: The Central Government (i.e., the President of India) has the power to nominate up to three members to the Puducherry Legislative Assembly, under **Section 3(3) of the Government of Union Territories Act, 1963.**

Hence statement 1 is incorrect.

● Procedure: The Supreme Court has ruled (in K. Lakshminarayanan v. Union of India, December 2018) that:

● These nominations are solely the prerogative of the Central Government, and do not require consultation with the Government of Puducherry or the Chief Minister.

Hence statement 2 is incorrect.

● The nominated members enjoy the same rights as elected MLAs, including the ability to vote on all legislative matters—from budget approvals to no-confidence motions.

2. Jammu & Kashmir (UT)

● **Authority:** Under the Jammu & Kashmir Reorganisation Act, 2019, plus its 2023 amendment, the Lieutenant Governor (LG)—not the Central Government—has the authority to nominate up to five members to the new J&K Legislative Assembly. These include:

- Two women, if women are not adequately represented
- Two Kashmiri migrants (one of whom must be a woman)
- One person displaced from Pakistan-occupied Jammu & Kashmir (PoJK)

● **Discretion:** The Ministry of Home Affairs (MHA) has submitted an affidavit in the J&K High Court affirming that the LG has complete statutory discretion to nominate these members and is not bound by the "aid and advice" of the elected UT government or its Council of Ministers.

● **Controversy:** Critics have raised constitutional objections—arguing that this power could potentially alter the Assembly's balance, impacting government formation. However, the Supreme Court declined to directly entertain legal challenges regarding these nominations and directed petitioners to first approach the High Court.

● **Voting Rights:** All nominated members in J&K are granted full voting rights, including participation in government formation processes. **Hence statement 3 is correct.**

3. Delhi (NCT)

● Delhi has a legislative assembly, but there are no provisions for nominated MLAs—all 70 members are directly elected. **Hence statement 4 is correct.**

PYQ REFERENCE:

Q. Consider the following statements:

1. The Chairman and the Deputy Chairman of the Rajya Sabha are not the members of that House.
2. While the nominated members of the two Houses of the Parliament have no voting right in the presidential election, they have the right to vote in the election of the Vice-President.

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/who-decides-nominations-to-ut-assemblies-explained/article69948834.ece>

12. Toll collection in India

12. Consider the following statements with respect to toll collection in India:

1. Section 7 of the National Highways Act, 1956 empowers the Government to levy fees for services or benefits rendered on national highways.
2. The levy of user fee is based on the cost of construction or its recovery.
3. After the concession period is over the toll collected goes directly to the Consolidated Fund of India.

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: The Public Accounts Committee (PAC) of Parliament has recommended significant reforms to toll collection practices on national highways, such as calling for an end to the perpetual tolling system.

Concerns in the current toll collection system in India:

- Toll is being collected indefinitely, even after recovery of construction and maintenance costs.
- The Public Accounts Committee recommends that tolling should end or be drastically reduced once these costs are recovered. Any continued tolling must be

justified and approved by an independent oversight authority.

- The Public Accounts Committee proposes setting up a specialised toll regulatory authority to ensure:
 - Transparency in toll rate setting
 - Accountability in collection
 - Independent evaluation of cost and pricing

How is toll determined?

- Section 7 of the National Highways Act, 1956 empowers the Government to levy fees for services or benefits rendered on national highways while Section 9 empowers the Union government to make rules in this regard. **Hence statement 1 is correct.**
- Accordingly, the policy for the collection of user fee is formulated and governed by the National Highways Fee (Determination of Rates and Collection) Rules, 2008.
- The levy of user fee is based on the base rates fixed under the NH Fee Rules across the country and is not related to the cost of construction or its recovery. **Hence statement 2 is incorrect.**
- The rates of fees have been increasing by 3% each year from April 1, 2008.
- In order to cover the impact of variable cost of operation and maintenance, 40% of annual increase of WPI is provided.
- The fee is to be collected by the Union government if a highway is publicly funded or by the concessionaire if it follows any of these models — Build Operate Transfer (BoT), Toll-Operate-Transfer (ToT) or developed under Infrastructure Investment Trust.
- An amendment in 2008 allowed user fees to be collected in perpetuity. So, if the concession period is over, the highway is handed over to NHAI, and the toll collected will go directly to the Consolidated Fund of India. **Hence statement 3 is correct.**

Source:

<https://www.thehindu.com/news/national/how-should-toll-collection-practices-be-reformed-explained/article69948846.ece>

13. Article 143

13. Consider the following:

- I. Dispute arising out of any pre-Constitution treaty
- II. Any question of law or fact of public importance

Which of the above are covered under the scope of Article 143 of the constitution:

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

Answer: (c) Both I and II

Explanation:

In NEWS: 14 questions raised by President Murmu in Presidential Reference

Article 143 in Constitution of India

143. Power of President to consult Supreme Court

(1)

If at any time it appears to the President that a question of law or fact has arisen, or is likely to arise, which is of such a nature and of such public importance that it is expedient to obtain the opinion of the Supreme Court upon it, he may refer the question to that Court for consideration and the Court may, after such hearing as it thinks fit, report to the President its opinion thereon.

(2)

The President may, notwithstanding anything in the proviso to article 131, refer a dispute of the kind mentioned in the said proviso to the Supreme Court for opinion and the Supreme Court shall, after such hearing as it thinks fit, report to the President its opinion thereon.

Article 143:

- Article 143 empowers the President of India to seek the opinion of the Supreme Court on significant legal or constitutional questions.
- This provision is unique in allowing a non-judicial authority (the President) to **directly consult the apex court.**
- The question must be any question of law or fact of public importance that the President deems it expedient to obtain the Court's opinion. **Hence I is correct.**
- This reference by the President is known as a Presidential Reference.
- The Supreme Court may choose to give its opinion under Article 143(1) — it is not obligated to do so.
- Under Article 143(2), if the reference concerns a pre-Constitution treaty, agreement, covenant, or sanad, the Supreme Court must provide its opinion. **Hence II is correct.**
- The Supreme Court's opinion given under Article 143 is advisory, meaning it is **not legally binding on the President or the government.**
- Despite being non-binding, the opinion of the Supreme Court is usually respected and followed by the government.
- Article 143 helps prevent constitutional or legal crises by allowing advance consultation before action is taken.
- The process helps in clarifying complex constitutional matters, especially those involving Centre-State relations or the powers of constitutional authorities.

Examples of Past Presidential References under Article 143:

1. In 1951, the President referred **the Berubari Union case** to the Supreme Court to seek its opinion on the division of Indian territory between India and Pakistan.
2. In 1971, following **the Kesavananda Bharati case**, the President sought the Supreme Court's opinion on whether Parliament could amend the Constitution's basic structure.
3. In 1993, the President made a reference related to the appointment of judges, which resulted in the Supreme Court establishing the Collegium system. This is also known as **the Second Judges Case**.
4. In 2012, the President asked the Supreme Court for its opinion on the allocation of natural resources, especially whether auctions were mandatory — a reference made after **the 2G spectrum case**.
5. In 2016, the President sought the Supreme Court's opinion on **the Satluj-Yamuna Link Canal dispute** concerning water sharing between Punjab and Haryana.
6. President Droupadi Murmu on May 13, 2025, regarding the **powers of the Governor and the President in granting assent to Bills** under Articles 200 and 201 of the Constitution.

PYQ REFERENCE:

Q. With reference to the Constitution of India, prohibitions or limitations or provisions contained in ordinary laws cannot act as prohibitions or limitations on the constitutional powers under Article 142. It could mean which one of the following?

- (a) The decisions taken by the Election Commission of India while discharging its duties cannot be challenged in any court of law.
- (b) The Supreme Court of India is not constrained in the exercise of its powers by the laws made by Parliament.**
- (c) In the event of grave financial crisis in the country, the President of India can declare Financial Emergency without the counsel from the Cabinet.
- (d) State Legislatures cannot make laws on certain matters without the concurrence of Union Legislature.

Source:

<https://www.thehindu.com/news/national/14-questions-president-murmu-supreme-court-reference/article69954747.ece>

14. Pradhan Mantri Janjati Adivasi Nyaya MahaAbhiyan (PM JANMAN)

14. The PM JANMAN aims to improve the socio-economic conditions of PVTGs over 3 years by providing how many of the following benefits:

1. Safe housing
2. Clean drinking water
3. Education, health, and nutrition
4. Road and telecom connectivity
5. Electrification of unelectrified households
6. Sustainable livelihood opportunities
7. Urbanization of tribal hamlets

Select the correct answer using the code given below:

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

Answer: (c) 1, 2, 3, 4, 5 and 6 only

Explanation:

In NEWS: The Union Minister of State for Tribal Affairs Shri Durgadas Uikey answered an un-starred question of Shri. Sandeep Kumar Pathak informed Rajya Sabha that on 15th November 2023, Hon'ble Prime Minister launched Pradhan Mantri Janjati Adivasi Nyaya MahaAbhiyan (PM JANMAN) for socio-economic development of 75 PVTG communities residing in 18 states and one UT.

PM JANMAN (Pradhan Mantri Janjati Adivasi Nyaya MahaAbhiyan):

- The PM JANMAN mission was launched by the Hon'ble Prime Minister on 15th November 2023 for the **socio-economic development of 75 Particularly Vulnerable Tribal Groups (PVTGs)**.
- The mission covers **18 states and 1 Union Territory** where these PVTG communities reside.
- PM JANMAN aims to improve the socio-economic conditions of PVTGs over 3 years by providing:
 - Safe housing
 - Clean drinking water
 - Education, health, and nutrition
 - Road and telecom connectivity
 - Electrification of unelectrified households
 - Sustainable livelihood opportunities **Hence option (c) is correct.**
- The mission includes 11 interventions implemented by 9 line Ministries, each responsible for a specific intervention.
- The **Ministry of Tribal Affairs, in coordination with State Governments and UT Administrations**, has

conducted a habitation-level data collection using the PM Gati Shakti mobile app to estimate population and infrastructure gaps.

● **IEC (Information, Education, and Communication) camps** have been organized to raise awareness and help PVTG individuals **prepare essential documents** like:

- Aadhaar Card
- Caste Certificate
- Jan Dhan Bank Account

● These documents help beneficiaries access various government schemes such as:

- Ayushman Bharat
- PM Awas Yojana
- MNREGA

● The mission includes the provision of hostels for PVTG students and mobile medical units to deliver healthcare in remote PVTG habitations.

● **Multipurpose Centres (MPCs)** are being set up to deliver multiple services (e.g., Anganwadi, health services) under one roof in PVTG areas.

● Livelihood generation is supported through the establishment of **Van Dhan Vikas Kendras (VDVKs)**, with flexible norms for forming **Self-Help Groups (SHGs)**.

● For effective planning and execution, District Level Committees and Block Level Implementation Teams are formed as per the mission's guidelines.

PYQ REFERENCE:

Q. Consider the following statements about Particularly Vulnerable Tribal Groups (PVTGs) in India:

1. PVTGs reside in 18 States and one Union Territory.
2. A stagnant or declining population is one of the criteria for determining PVTG status.
3. There are 95 PVTGs officially notified in the country so far.
4. Irular and Konda Reddi tribes are included in the list of PVTGs.

Which of the statements given above are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2158297>

15. Filing of Nomination for the Election of Vice-President

15. Consider the following statements with respect to the election of Vice President of India:

1. To become a candidate for the Vice-Presidential election, a person must be nominated according to the procedure laid down under the Presidential and Vice-Presidential Elections Act, 1952
2. The nomination paper must be Proposed by at least 20 members of Parliament, and seconded by another 20 members of Parliament.
3. The nomination of a candidate can be retracted after the withdrawal by submitting a written notice before the deadline prescribed in the election schedule.

Which of the statements given above is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: C.P. Radhakrishnan files nomination as NDA's vice-presidential candidate

Vice - President:

● The Vice President of India is the deputy to the **head of state of the Republic of India**, i.e. the president of India.

● The Term of Office of the Vice President is 5 years

● He/She is eligible for re-election

● Role of the Vice President

○ Ex-officio Chairperson of Rajya Sabha

○ Acts as President of India in the event of:

○ Vacancy due to death, resignation, removal, or

incapacity of the President

○ Temporarily when the President is unable to discharge their duties

Nomination Process of the Vice President of India

● To become a candidate for the Vice Presidential election, a person must be nominated according to the procedure laid down under **the Presidential and Vice-Presidential Elections Act, 1952** and the Rules made thereunder. **Hence statement 1 is correct.**

● A person wishing to contest must file a nomination paper. This must be submitted to the Returning Officer, usually the Secretary-General of either House of Parliament (by rotation).

● The **nomination paper must be Proposed by at least 20 members of Parliament, and seconded by**

another 20 members of Parliament. **Hence statement 2 is correct.**

- These members can be from either Lok Sabha or Rajya Sabha, and may include nominated members.
- A deposit of ₹15,000 must be made along with the nomination. This is to be submitted to the Reserve Bank of India or specified offices.
- The Returning Officer scrutinizes all nomination papers, Checks eligibility under Article 66 and the Representation of the People Act.
- A candidate can withdraw by submitting a written notice before the deadline prescribed in the election schedule. Once withdrawn, it cannot be retracted. **Hence statement 3 is incorrect.**

Election Process of the Vice President of India

- **Article 63:** There shall be a Vice-President of India.
- **Article 66:** Deals with the election of the Vice-President.
- Conducted by: Election Commission of India (ECI)
- The Vice-President is elected indirectly by an Electoral College consisting of:
 - Members of both Houses of Parliament:
 - Elected members of Lok Sabha (MPs)
 - Elected members of Rajya Sabha (MPs)
 - Nominated members of Rajya Sabha and Lok Sabha
 - State Legislative Assemblies do NOT take part in this election.

● The election is conducted by means of Proportional Representation by means of **Single Transferable Vote (STV) through a Secret ballot.**

Eligibility Criteria:

- To contest the election, a person must:
- Be a **citizen of India.**
- Be **at least 35** years old.
- Be qualified to be elected as a **Rajya Sabha member.**
- **Not hold any office of profit** under the Government of India or any State Government (except Vice-President, Governor, or Minister).

Removal Process:

- The Vice President can be removed by a resolution of the Rajya Sabha passed by a majority and agreed to by the Lok Sabha.
- No formal impeachment process like the President.

PYQ REFERENCE:

Q. For election to the Lok Sabha, a nomination paper can be filed by

- (a) anyone residing in India.
- (b) a resident of the constituency from which the election is to be contested.
- (c) any citizen of India whose name appears in the electoral roll of a constituency.**
- (d) any citizen of India.

Source:

<https://www.thehindu.com/news/national/ndas-vice-presidential-candidate-nomination-filing-on-august-20-2025/article69954680.ece>

16. Assent of Bills by Governor

16. Consider the following statements:

1. The Constitution does not specify a timeframe within which the Governor must act on bills passed by a State Legislature.
2. The Governor has the power to return even Money Bills to the State Legislature for reconsideration.
3. When the Governor reserves the Bill for the Consideration of the President, the bill cannot be returned for reconsideration.

Which of the statements given above is/are correct?

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

Answer: (a) 1 only

Explanation:

In NEWS: Are elected State govts. at mercy of Governors' whims and fancies, SC asks Centre

- A Presidential Reference was made to the Supreme Court seeking clarity on the powers of Governors regarding their role in granting or withholding assent to Bills passed by State legislatures.
- Triggered largely by events involving the Tamil Nadu Governor, the case raises fundamental questions about Centre-State relations, federalism, and democratic accountability.

Powers of Governors Regarding Assent to Bills:

- In India, the Governor's powers with respect to giving assent to Bills are outlined in Article 200 of the Constitution.
- The Constitution does not specify a timeframe within which the Governor must act. **Hence statement 1 is correct.**
- This has led to criticism and litigation over delays and inaction by Governors.
- These powers relate to the Governor's role in the law-making process at the state level and are intended to act as a check and balance in a federal structure.

When a Bill is passed by a State Legislature, it is presented to the Governor for assent. The Governor has four options:

● **Assent to the Bill**

- The Governor may approve the Bill.
- It then becomes law.

● **Return the Bill (for reconsideration)**

- The Governor can return the Bill (except Money Bills) to the State Legislature once for reconsideration. **Hence statement 2 is incorrect.**

- If the Legislature re-passes the Bill (with or without amendments), the Governor: Must give assent or can reserve it for the President's consideration (if it may conflict with Central laws).

● **Withhold Assent**

- The Governor may withhold assent, meaning the Bill does not become law.
- The Constitution does not specify a time limit or clearly define the consequence of withholding assent.

● **Reserve the Bill for the Consideration of the President**

- The Governor must reserve a Bill:
 - If it may contravene a Central law (repugnancy under Article 254).
 - If it involves matters requiring Presidential sanction (e.g., affecting High Court powers, land rights of SC/STs, etc.)
- President may:
 - Give assent
 - Withhold assent
 - Return it for reconsideration. **Hence statement 3 is incorrect.**

Article	Provision
Article 200	Governor's powers on State Bills
Article 201	President's powers when a State Bill is reserved
Article 111	Similar provisions for the President on Central Bills
Article 254	Repugnancy between State and Central laws
Article 163	Governor to act on aid and advice of Council of Ministers (except in discretionary matters)

PYQ REFERENCE:

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

- I. The Constitution of India explicitly mentions situations where the Governor of a State can act in his/her discretion.
- II. The President of India can, on his/her own, reserve a Bill passed by a State Legislature for consideration, even without it being forwarded by the Governor of the concerned State.

Which of the above statements is/are correct?

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

Source:

<https://www.thehindu.com/news/national/supreme-court-hearing-presidential-reference-elected-state-governments-at-mercy-of-governors-whims/article69955716.ece>

17. OBC Creamy Layer

17. With reference to the 'OBC creamy layer criteria', which among the following statements is/ are correct? An individual is deemed part of the creamy layer if either of the parents holds or held:

1. Constitutional or statutory position.
2. Group A post direct recruit or promotion before turning 40
3. One of them in a Group B post
4. Military rank of Colonel or equivalent in Navy/Air Force
5. an annual family income exceeding ₹8 lakh

Select the correct answer using the codes given below:

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

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

Explanation:

In NEWS: Centre pushes for 'equivalence' in OBC quota 'creamy layer'

Creamy layer:

- Creamy layer is a term used in the reservation system of India to refer to some members of a backward class who are highly advanced socially as well as economically and educationally.
- They are not eligible for government-sponsored educational and professional benefit programs.

- The term “creamy layer” emerged in Indian jurisprudence in the **State of Kerala v. N.M. Thomas (1976) case**.
- The doctrine was solidified in the **Indra Sawhney v. Union of India (1992)** Supreme Court judgment.
- The Court upheld **27% reservation for Other Backward Classes (OBCs)**, but ruled that the more advanced (i.e., the “creamy layer”) among them should be excluded to ensure equity

Income Threshold (Non-Government Category):

- The creamy layer includes families with an annual income exceeding **₹8 lakh (from sources excluding agriculture and salary)**
 - Income limits have been progressively raised: ₹1 lakh (1993), ₹2.5 lakh (2004), ₹4.5 lakh (2008), ₹6 lakh (2013), and ₹8 lakh (2017)
- Although the DoPT intended revisions every three years, the threshold hasn't changed since 2017

Government Employment or High-Ranking Positions (irrespective of income):

An individual is deemed part of the creamy layer if either of the parents holds or held:

- Constitutional or statutory position, or
- Group A post (direct recruit or promotion before turning 40), or if both are in Group B, or
- Military rank of Colonel or above (or equivalent in Navy/Air Force)
- These categories are considered socially and educationally advanced and thus excluded from reservation benefits.

Hence statements 1, 2, 4 and 5 are correct.

Proposals and Recommendations:

- Parliamentary and DoPT documents (2024–2025) suggest raising the income threshold to ₹12 lakh or even ₹15 lakh, and reconsidering whether salary should be included in income calculations or excluded like agricultural income

PYQ REFERENCE:

Q. Consider the following statements regarding ‘Nari Shakti Vandan Adhiniyam’:

1. Provisions will come into effect from the 18th Lok Sabha.
2. This will be in force for 15 years after becoming an Act.
3. There are provisions for the reservation of seats for Scheduled Castes Women within the quota reserved for the Scheduled Castes.
- 4.

Which of the statements given above are correct?

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

Source: <https://www.gktoday.in/government-moves-to-standardise-obc-creamy-layer-criteria/>
<https://www.moneycontrol.com/news/india/centre-pushes-for-equivalence-in-obc-quota-creamy-layer-who-are-the-likely-beneficiaries-13466666.html>

18. Jan Vishwas Bill 2025

18. Which of the following best describes the primary objective of the Jan Vishwas Bill, 2025?

- (a) To consolidate all central laws into a single code
- (b) To decriminalize major economic offences in India
- (c) To simplify laws and reduce regulatory compliance burden
- (d) To create fast-track courts for speedy trial of minor offences

Answer: (c) To simplify laws and reduce regulatory compliance burden

Explanation:

In NEWS: Jan Vishwas 2.0: Centre set to table decriminalisation bill in Lok Sabha.

- This Bill proposes amendments to 355 provisions across 16 Central Acts. Its primary objective is to ease the applicability of laws by decriminalising 288 minor offences and amending 67 provisions to promote ease of living.

The Jan Vishwas Bill, 2025:

- The Jan Vishwas Bill, 2025 is part of the Government’s ongoing effort to simplify laws and reduce regulatory burdens. **Hence option (c) is correct.**
- The 2023 Act was the first consolidated legislation aimed at decriminalising minor offences to encourage trust-based governance.
- The 2025 Bill extends this effort by targeting more provisions and introducing proportionate penalties.
- The Government emphasises ‘Minimum Government Maximum Governance’ to improve ease of doing business and ease of living.

Key Provisions and Amendments

- The Bill proposes decriminalisation of 288 minor offences by replacing imprisonment clauses with warnings or monetary penalties.
- For 76 offences under 10 Acts, first-time contraventions will attract advisory or warning only.
- Penalties will be proportionate and escalate with repeated violations. Monetary fines will increase by 10% every three years after enactment.
- The amendments cover diverse laws including the Motor Vehicle Act, 1988 and the New Delhi Municipal Council Act, 1994.

Impact on Governance and Business

- By reducing fear of imprisonment for minor infractions, the Bill aims to boost business confidence and growth.
- It seeks to reduce judicial burden by encouraging settlement through compounding, adjudication, and administrative mechanisms.
- This will save time and resources for individuals and businesses.
- The Bill also supports business process reengineering and modernisation of regulatory frameworks in India's socio-economic context.

PYQ REFERENCE:

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.livemint.com/news/india/jan-vishwas-2-0-centre-set-to-table-decriminalisation-bill-in-lok-sabha-here-are-five-things-to-look-out-for-11755360744745.html>
<https://www.gktoday.in/jan-vishwas-bill-2025/>

19. Critical Minerals Bill

19. With reference to the Mines and Minerals (Development and Regulation) Amendment Bill, 2025, Consider the following statements:

1. Leaseholders can include critical minerals like lithium and cobalt in their existing leases without extra payment.
2. The National Mineral Exploration Trust's scope is limited strictly to exploration of onshore resources.
3. Captive mines will continue to be restricted to selling only up to 50% of their output annually.

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

Answer: (a) 1 only

Explanation:

In NEWS: Rajya Sabha Tuesday passed The Mines and Minerals (Development and Regulation) Amendment Bill, 2025 which seeks to boost the supply of critical and deep-seated minerals, and relax the regime for mineral conservation, zero waste management and extraction of strategic minerals.

Key Provisions of the Mines and Minerals (Development and Regulation) Amendment Bill, 2025:

1. Addition of Minerals in Existing Leases

- Leaseholders can now add critical and strategic minerals such as lithium, graphite, nickel, cobalt, gold, and silver to their existing mining leases without paying additional royalty or auction premiums. **Hence statement 1 is correct.**

- For other minerals, standard royalties (and auction premiums in the case of auctioned mines) apply, as per state or notification rules.

2. Expanded Scope of the National Mineral Exploration Trust

- Renamed as the National Mineral Exploration and Development Trust (NMEDT).
- Its mandate is broadened to finance both mineral exploration and development—including offshore and international activities. **Hence statement 2 is incorrect.**
- Contribution by lessees is increased from 2% to 3% of mineral royalty.

3. Removal of Sales Cap for Captive Mines

- The previous cap of 50% sales post meeting end-use requirements is removed. **Hence statement 3 is incorrect.**
- Captive mine operators can now sell 100% of their production, and states may permit sale of mineral dumps as well.

4. Lease Area Extension for Deep-Seated Minerals

- Defined as minerals located deeper than 200 meters, mining areas may be extended one-time:
- Composite licences: Up to 30% expansion
- Mining leases: Up to 10% expansion

5. Establishment of Mineral Exchanges

- The Bill provides for the creation of a regulatory authority to oversee mineral exchanges—electronic platforms for trading minerals.
- Rules cover registration, fee structure, prevention of market manipulation, and grievance redressal mechanisms.

6. Strategic Vision & Economic Impact

- Aims to improve domestic availability of critical and strategic minerals, reducing import dependence.
- Supports the National Critical Mineral Mission with a ₹34,000 crore outlay and a focus on enhancing supply from overseas and offshore sources.

- Designed to liberalize regulatory norms, attract investments, and ensure transparency in mining operations.

PYQ REFERENCE:

Q. Consider the following statements:

Statement I: In India, State Governments have no power for making rules for grant of concessions in respect of extraction of minor minerals even though such minerals are located in their territories.

Statement II: In India, the Central Government has the power to notify minor minerals under the relevant law.

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

- Both Statement I and II are correct but statement II explains Statement I
- Both Statement I and II are correct and statement II does not explain Statement I
- Statement I is correct but Statement II is not correct
- Statement I is not correct but Statement II is correct

Source:

<https://www.downtoearth.org.in/energy/rajya-sabha-passes-critical-minerals-bill-rs-32000-crore-allotted-for-exploration-outside-india>

<https://indianexpress.com/article/india/rs-passes-bill-to-boost-exploration-and-supply-of-critical-and-deep-seated-minerals-10199595/>

20. India's first fully digitally literate state

20. Which one of the following states became India's first fully digitally literate state?

- Tamil Nadu
- Maharashtra
- Kerala
- West Bengal

Answer: (c) Kerala

Explanation:

In NEWS: 'Kerala India's first fully digitally literate State'

Hence option (c) is correct

Kerala Declared India's First Fully Digitally Literate State:

- Statewide Reach: Covered 1.5 crore people from 83.46 lakh families.
- Digital Illiteracy Identified: 21.88 lakh people were identified as digitally illiterate.
- The national digital literacy rate is only 38%, making Kerala's **99.98%** achievement remarkable.

- 21.87 lakh people trained, training was extended to remote tribal regions like Edamalakudy and Attappady.
- Special focus on senior citizens and homemakers who lacked digital exposure.

Definition of "Fully Digitally Literate State":

- A state can be considered fully digitally literate when:
- A vast majority (typically 99% or more) of the population can:
 - Operate digital devices (smartphones, tablets, computers).
 - Access and navigate the internet.
 - Use digital services (like paying bills online, applying for documents, using government portals, etc.).
 - Communicate via email, messaging apps, or video calls.
 - Digital literacy is measured through surveys, training completion, and evaluations.

Digi Kerala Project:

- It originated from Pullampara Panchayat in 2021.
- Scaled to the entire state after success in the pilot phase.
- Aimed to bridge the digital divide at the grassroots.
- Integrated with K-SMART platform for online access to government services.
- Citizens are now empowered digitally to apply for:
 - Building permits
 - Birth certificates
 - Other civic services

Source:

<https://www.thehindu.com/news/national/kerala/kerala-declared-first-fully-digitally-literate-state-in-the-country/article69960592.ece>

21. 130th Constitution Amendment Bill

21. The Constitution (One Hundred and Thirtieth Amendment) Bill, 2025, which aims to amend which of the following articles of the constitution of India?

- Article 75
- Article 97
- Article 164

Select the correct answer using the codes given below:

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1 and 3 only

Answer: (d) 1 and 3 only

Explanation:

In NEWS: What is the new Bill to remove the PM, CM and Ministers?

130th Constitutional Amendment Bill:

1. What does the Bill say?

- The Bill seeks to amend **Articles 75 and 164** of the Constitution regarding Union and State Councils of Ministers. **Hence statements 1 and 3 are correct.**
 - **Article 75** of the Indian Constitution outlines provisions for Union Ministers, including their appointment by the President, collective responsibility to the Lok Sabha, and the requirement to be a Member of Parliament within six months of taking office.
 - **Article 164** deals with State Ministers, stipulating their appointment by the Governor, accountability to the State Legislature, and the six-month membership requirement to the State Legislature
- A Minister arrested and detained for 30 consecutive days in relation to an offence punishable with at least 5 years imprisonment shall be removed from office.
- Removal will be based on the advice of the PM/CM; if not given, the Minister automatically ceases to hold office from the 31st day.
- If the PM or CM is arrested for 30 days, they must resign on the 31st day.
- The PM/CM/Minister can be reappointed upon release.
- The Bill also seeks to amend Article 239AA (for NCT of Delhi).
- Similar provisions are proposed for Union Territories of J&K and Puducherry.
- Passage of the amendment requires a two-thirds majority in both Houses of Parliament.
- The Bills have been referred to a Joint Parliamentary Committee (JPC) for scrutiny.

2. Existing Laws

- The Representation of the People Act, 1951 disqualifies a person convicted and sentenced to at least 2 years in jail from being an MP/MLA during the sentence and for 6 years after.
- Earlier, Section 8(4) of RP Act allowed sitting MPs/MLAs to avoid disqualification if an appeal was filed, but this was struck down in Lily Thomas v. Union of India (2013).
- Existing law disqualifies only legislators, not ministers.
- In 2016, the Election Commission recommended amending the RP Act to bar candidates from contesting elections if charges were framed for offences punishable with at least 5 years.

3. Issues with the Bill

- The Bill allows loss of ministerial office based on police action before trial or conviction.
- It undermines parliamentary democracy, where the PM/CM has discretion in cabinet formation.
- It may give the Union government power to act vindictively against ministers in opposition-ruled states.

Current data:

- An analysis of MPs and MLAs across India shows that 31% of MPs and 29% of MLAs have declared serious criminal charges against them. As the analysis was conducted immediately after the most recent parliamentary elections, and Assembly elections in each State, it does not reflect some of the current set of MPs and MLAs.
- A serious criminal charge includes offences where the maximum punishment is five years or more, or those that are non-bailable.
- In the Lok Sabha, the share of MPs facing serious criminal cases has more than doubled, from 14% in 2009 to 31% in 2024 (Chart 1). In the Assemblies, the share was 29% in 2024, which accounts for more than 1,200 MLAs.
- Telangana had the highest share of MPs with serious criminal cases (71%), followed by Bihar (48%). Uttar Pradesh recorded the highest absolute number at 34, as seen in Chart 2.
- The Bharatiya Janata Party (BJP) had the highest absolute number of MPs facing serious cases (63 members or 26% of its total). The Congress followed with 32 MPs (32%). Among smaller parties, the proportions were higher: all four MPs of the Rashtriya Janata Dal (RJD) had serious cases against them (Chart 3).
- Andhra Pradesh had the highest share of MLAs with serious criminal cases at 56%, followed by Telangana (50%). U.P. recorded the highest absolute number (154 MLAs or 38% of its total) (Chart 4).
- While 61% of the Telugu Desam Party (TDP)'s MLAs faced serious cases, 62% of the RJD's did. The BJP, which has the largest presence in Assemblies, accounted for 436 MLAs (26%) with serious cases, followed by the Congress (194 MLAs; 30%) (Chart 5).

Cases against lawmakers

Data for the charts were sourced from the Association for Democratic Reforms (ADR)



Chart 2: State-wise MPs with serious criminal cases. The farther to the right, the higher the % share of such MPs; the bigger the circle, the higher the number of such MPs

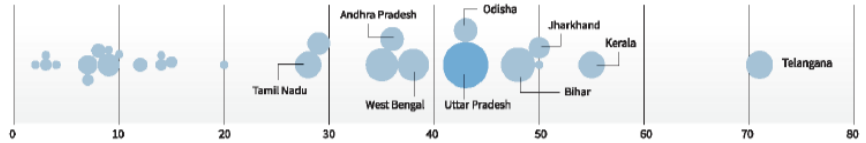


Chart 3: Party-wise MPs with serious criminal cases. The farther to the right, the higher the % share of such MPs; the bigger the circle, the higher the number of such MPs

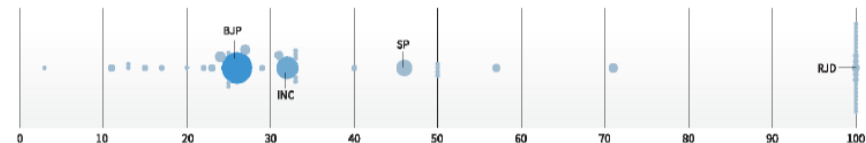


Chart 4: State-wise MLAs with serious criminal cases. The farther to the right, the higher the % share of such MLAs; the bigger the circle, the higher the number of MLAs

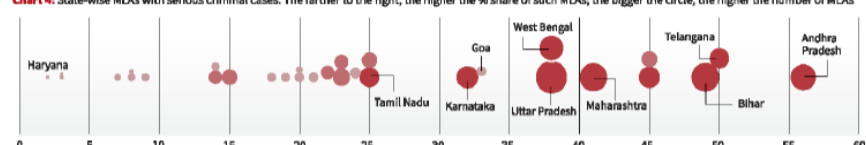


Chart 5: Party-wise MLAs with serious criminal cases. The farther to the right, the higher the % share of such MLAs; the bigger the circle, the higher the number of MLAs



4. Way Forward

- The Bill targets the effect rather than the cause of criminalisation in politics.
- Reports by Association for Democratic Reforms (ADR) highlight:
 - 46% of MPs and 45% of MLAs have criminal cases.
 - Candidates with criminal backgrounds have a 15.4% chance of winning vs 4.4% for clean candidates.
 - Political parties should exercise self-discipline by not fielding tainted candidates despite their “winnability.”
 - Long-term reforms must aim at decriminalisation of politics rather than reactive disqualifications.

PYQ REFERENCE:

Q. The Constitution (Seventy-Third Amendment) Act, 1992, which aims at promoting the Panchayati Raj Institutions in the country, provides for which of the following?

1. Constitution of District Planning Committees.
2. State Election Commissions to conduct all panchayat elections.
3. Establishment of State Finance Commissions.

Select the correct answer using the codes given below:

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

Source:

<https://www.thehindu.com/news/national/what-is-the-new-bill-to-remove-pm-cm-and-ministers-explained/article69972764.ece>

22. National Company Law Appellate Tribunal (NCLAT)

22. Which among the following functions can be exercised by the National Company Law Appellate Tribunal (NCLAT)?

1. It can hear appeals against orders of NCLT under the Companies Act, 2013.
2. It can hear appeals against orders of the Insolvency and Bankruptcy Board of India (IBBI) under IBC, 2016.
3. It can hear appeals against orders of the Election commission of India under the Representation of the People Act, 1951.
4. It can hear appeals against orders of the Competition Commission of India (CCI) under the Competition Act, 2002.

Select the correct answer using the code given below:

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

Answer: (c) 1, 2 and 4 only

Explanation:

In NEWS: In a rare incident, a judicial member of the National Company Law Appellate Tribunal (NCLAT) has alleged being "approached by one of the most revered members of the higher judiciary"

National Company Law Appellate Tribunal (NCLAT):

- NCLAT was established under Section 410 of the Companies Act, 2013. It was constituted on 1st June 2016.
- NCLAT is a quasi-judicial body.
- It hears appeals against orders of NCLT under the Companies Act, 2013.
- It also hears appeals against orders of the Insolvency and Bankruptcy Board of India (IBBI) under IBC, 2016.
- It hears appeals against orders of the Competition Commission of India (CCI) under the Competition Act, 2002.
- It hears appeals against orders of the National Financial Reporting Authority (NFRA). **Hence statements 1, 2 and 4 are correct.**
- NCLAT is headed by a Chairperson, who must be a retired Supreme Court judge or Chief Justice of a High Court.
- It also consists of judicial and technical members.
- Appeals from NCLAT can be filed before the Supreme Court of India.
- NCLAT plays a vital role in ensuring speedy resolution of corporate disputes.

- It strengthens corporate governance, insolvency resolution, and competition regulation in India.

Source:

<https://www.thehindu.com/news/national/nclat-judicial-member-alleges-being-approached-by-judge-for-favour-recuses-himself/article69979721.ece>
<https://www.livewlaw.in/news-updates/nclat-judge-chennai-recusal-higher-judicial-member-order-favouring-party-301980#:~:text=The%20judicial%20member%20of%20National%20Company%20Law%20Appellate,judiciary%22%20seeking%20an%20order%20favouring%20a%20particular%20party.>

SCHEMES

1. Operation Muskaan-XI

1. Which one of the following articles of the Indian constitution has its best reflection in 'Operation Muskaan-XI', recently conducted in the state of Telangana?

- (a) Article 16
- (b) Article 25
- (c) Article 17
- (d) Article 24

Answer: (d) Article 24

Explanation:

In NEWS: Over 7,600 children rescued under Operation Muskaan-XI

Operation Muskaan-XI:

- Operation Muskaan-XI was conducted across Telangana from 1 to 31 July 2025. It focused on rescuing children from exploitative and hazardous conditions.
- This operation has realised the ideals in the fundamental right under **Article 24** of the Indian constitution. **Hence option (d) is correct.**
- The mission involved extensive coordination between police, government departments, and NGOs.
- It targeted vulnerable locations like railway stations, construction sites, and religious places. Thousands of children were rescued during a month-long drive.

Article 24:

"24. Prohibition of employment of children in factories, etc.

No child below the age of fourteen years shall be employed to work in any factory or mine or engaged in any other hazardous employment."

Scope and Scale of Rescue:

- A total of 7,678 children were rescued. Among them, 7,149 were boys and 529 girls. More than half, 3,787 children, came from outside Telangana, covering 12 states.
- Additionally, 3,783 children were from Nepal. The operation covered urban and rural areas, focusing on high-risk zones such as brick kilns, mechanic shops, and bus stations.

Nature of Exploitation Identified:

- The majority, 6,718 children, were engaged in child labour. Other categories included 357 street children, 42 beggars, and two in bonded labour.
- Another 559 children were found in various hazardous or exploitative roles. These conditions severely impacted their health, education, and overall well-being.

Inter-Agency Coordination:

The success of Operation Muskaan-XI was due to strong collaboration. Police worked closely with the Women Development and Child Welfare Department, Labour and Health Departments, Child Welfare Committees, District Child Protection Units, and NGOs. Pre-operation meetings and video conferences helped streamline efforts and share information effectively.

PYQ REFERENCE:

Q. A legislation which confers on the executive or administrative authority an unguided and uncontrolled discretionary power in the matter of application of law violates which one of the following Articles of the Constitution of India?

- (a) Article 14
- (b) Article 28
- (c) Article 32
- (d) Article 44

Source:

<https://www.thehindu.com/news/cities/Hyderabad/over-7600-children-rescued-under-operation-muskaan-xi/article69883028.ece>
<https://www.newsonair.gov.in/operation-muskaan-xi-telangana-police-rescue-7600-children-from-exploitation/>

2. Kala Sanskriti Vikas Yojana (KSVY)

2. How many of the following components are covered under the Kala Sanskriti Vikas Yojana (KSVY), a central sector umbrella scheme under the Ministry of Culture?

1. Financial support in line with Guru-Shishya Parampara.
2. Financial Assistance for the Preservation & Development of Cultural Heritage of the Himalayas
3. Tagore National Fellowship for Cultural Research
4. Financial support for creation of new Large Cultural Spaces
5. Tax reimbursement for Charitable/Religious Institutions for distributing free food to public

Select the correct answer using the code given below:

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

Answer: (d) All five

Explanation:

In NEWS: Schemes for Upliftment of Scheduled Castes

KALA SANSKRITI VIKAS YOJANA (KSVY):

- Kala Sanskriti Vikas Yojana (KSVY) is an umbrella scheme under Ministry of Culture for the promotion of art and culture in the country.
- It consists of a number of Central Sector Schemes under which financial assistance is provided to eligible cultural organizations/ individuals working in the field of performing arts including artists of Scheduled Castes across the country.

It has the following sub-schemes under which financial assistance is provided to cultural organizations/individuals:

1. FINANCIAL ASSISTANCE FOR PROMOTION OF GURU-SHISHYA PARAMPARA (REPERTORY GRANT):

- The objective of this scheme component is to provide financial support for all genres of performing arts activities like dramatic groups, theatre groups, music ensembles, children theatre etc. and imparting training of artists by their respective Guru on regular basis **in line with Guru-Shishya Parampara.**
- As per the scheme, support is provided to 1 Guru and maximum 18 Shishyas in the field of theatre and 1 Guru and maximum 10 Shishyas in the field of music & dance.

- The Amount of Assistance for Guru is Rs.15000/- per month and for Shishya, the same is Rs.2000-10000/-per month depending upon the age of artist.

2. FINANCIAL ASSISTANCE FOR PROMOTION OF ART AND CULTURE:

- This scheme has following sub-components:
 - Financial Assistance to Cultural organizations with National Presence
 - Cultural Function & Production Grant (CFPG)
 - **Financial Assistance for the Preservation & Development of Cultural Heritage of the Himalayas**
 - Financial Assistance for the Preservation & Development of Buddhist/Tibetan Organization
 - Financial Assistance for Building Grants including Studio Theatres

3. FINANCIAL ASSISTANCE FOR CONSTRUCTION OF TAGORE CULTURAL COMPLEXES (TCC):

The aim of the scheme component is to provide financial support to NGO, Trust, Societies, Govt. Sponsored bodies, State / UT Govt. University, Central/State Govt. agencies/bodies, Municipal Corporations, reputed not-for-profit organizations etc. for **creation of new Large Cultural Spaces such as Auditorium** with facilities and infrastructure for stage performances (dance, drama and music), exhibitions, seminars, literary activities, green rooms, etc.

4. SCHEME OF SCHOLARSHIP AND FELLOWSHIP FOR PROMOTION OF ART AND CULTURE:

- The scheme consists of following three components:
 - Scheme for the Award of Fellowship to Outstanding Persons in the field of Culture
 - Scheme for Scholarships to Young Artistes in Different Cultural Fields
 - **Tagore National Fellowship for Cultural Research**

5. FINANCIAL ASSISTANCE FOR VETERAN ARTISTS:

The objective of this Scheme is to provide financial assistance maximum upto Rs.6.000/- p.m. to the old artistes and scholars aged 60 years above having annual income not exceeding Rs.72,000/- who have contributed significantly in their specialized fields of arts, letters etc. In the event of death of the beneficiary, the financial assistance is transferred to his/her spouse.

6. Seva Bhoj Yojna:

- Under the Scheme of 'Seva Bhoj Yojna' Central Goods and Services Tax (CGST) and Central Government's share of Integrated Goods and Services Tax (IGST) paid on purchase of specific raw food items by Charitable/Religious Institutions for distributing free food to public shall be **reimbursed as Financial Assistance by the Government of India.**

- Free 'prasad' or free food or free 'langar' / 'bhandara' (community kitchen) offered by charitable/religious institutions like Gurudwara, Temples, Dharmik Ashram, Mosques, Dargah, Church, Math, Monasteries etc. are covered under Seva Bhoj Yojana.

Hence all are correct

PYQ REFERENCE:

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

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2152160>

3. Pradhan Mantri Matru Vandana Yojana

3. With reference to Pradhan Mantri Matru Vandana Yojana, consider the following statements:

1. It is a Centrally Sponsored flagship scheme by the Ministry of Women and Child Development.
2. The eligible applicant should be employed and experiencing wage-loss due to the pregnancy.
3. Under the scheme, a cash incentive of ₹5,000 is provided in one installment for the first child, and ₹6,000 is provided in two installments post-birth for the second girl child.

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: The Ministry of Women and Child Development has extended the special registration drive for the Pradhan Mantri Matru Vandana Yojana (PMMVY) till 15 August, 2025.

The Pradhan Mantri Matru Vandana Yojana (PMMVY):

- The Pradhan Mantri Matru Vandana Yojana (PMMVY) is a Centrally Sponsored flagship scheme by the Ministry of Women and Child Development, Government of India, designed to support pregnant women and lactating mothers. **Hence statement 1 is correct.**
- The scheme aims to improve health-seeking behaviour among Pregnant Women and Lactating Mothers and ensure better maternal and child health outcomes across the country.
- The scheme is to provide maternity benefits to women belonging to socially and economically disadvantaged sections of society.
- The maternity benefit is to be provided to a woman for the first two living children provided the second child is a girl.
- The Pradhan Mantri Matru Vandana Yojana is a centrally sponsored scheme under Mission Shakti's sub-scheme 'Samarthya', providing direct financial assistance through the Direct Benefit Transfer (DBT) mode.
- Under PMMVY, a cash incentive of ₹5,000 is provided in **two installments** for the first child, and ₹6,000 is provided in **one installment** post-birth for the second girl child. **Hence statement 3 is incorrect.**

Eligibility:

- The applicant should be of at least 19 years old and a pregnant women.
- The applicant should be employed and experiencing wage-loss due to the pregnancy. **Hence statement 2 is correct.**
- The scheme is applicable only for the first live birth.
- Eligible beneficiaries can apply for the benefit under the PMMVY scheme within 270 days from the child birth.
- If a beneficiary delivers twins/ triplets/ quadruplets in her second pregnancy, with one or more children being girl, she will receive incentive for the second girl child as per the PMMVY 2.0 norms.

Exclusions:

- The beneficiary's husband's Aadhaar is not mandatory for availing the benefits under the Scheme.
- All pregnant women and lactating mothers in regular employment with the Central Government or State Government or Public Sector Undertaking or those who are in receipt of similar benefits under any law for the time being in force shall not be entitled to benefits under PMMVY.

PYQ REFERENCE:

Q. Consider the following statements in relation to Janani Suraksha Yojana:

1. It is a safe motherhood intervention of the State Health Departments.
2. Its objective is to reduce maternal and neonatal mortality among poor pregnant women.
3. It aims to promote institutional delivery among poor pregnant women.
4. Its objective includes providing public health facilities to sick infants up to one year of age.

How many of the statements given above are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2152087>

4. PAHAL Scheme

4. Consider the following statements with respect to the PAHAL scheme:

1. The scheme aims to streamline the subsidy process for Liquefied Petroleum Gas (LPG) consumers in India.
2. The scheme is implemented by Oil Marketing Companies (OMCs) through their network of LPG distributors.
3. The scheme has been recognized by the Guinness Book of World Records for being the world's largest cash transfer program.

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: Government Strengthens LPG Subsidy Transfers Through PAHAL and Aadhaar Authentication

PAHAL Scheme:

- The PAHAL (Direct Benefit Transfer for LPG Subsidy) scheme, also known as DBTL (Direct Benefit Transfer of LPG), is a government initiative in India aimed at streamlining the subsidy process for Liquefied Petroleum Gas (LPG) consumers. **Hence statement 1 is correct.**

- The scheme is implemented by Oil Marketing Companies (OMCs) through their network of LPG distributors. **Hence statement 2 is correct.**

Objectives of PAHAL (DBTL) Scheme are:

- a. Remove incentive for diversion.
- b. Weed out fake/duplicate connections. 4.08 crore such connections blocked/suspended/deactivated (till 01.07.2025).
- c. Protect entitlement and ensure subsidy to the consumer.
- d. Improve availability/delivery of LPG cylinders to genuine users.
- e. Allow self-selection in subsidy.

Significance of the scheme:

- Consumers purchase LPG cylinders at the full market price.
- The subsidy amount is then credited to the consumer's bank account, either through Aadhaar-linked accounts or other bank accounts linked to their LPG connection.
- By directly transferring the subsidy, the scheme aims to curb the diversion of subsidized cylinders to the black market.
- PAHAL helps in reducing subsidy leakages by ensuring that the subsidy reaches only genuine beneficiaries.
- The PAHAL scheme has been recognized by the Guinness Book of World Records for being the world's largest cash transfer program, benefiting millions of LPG consumers, according to Bharat Petroleum. **Hence statement 3 is correct.**
- While Aadhaar is used for linking accounts, it's not mandatory, and consumers can also link their bank accounts to their LPG connections without Aadhaar.

Source:

<https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2152413>

5. Nasha Mukh Bharat Abhiyaan (NMBA)

5. Which among the following statements is/are correct regarding Nasha Mukh Bharat Abhiyaan (NMBA)?

1. Nasha Mukh Bharat Abhiyaan intends to reach out to the masses and spread awareness about substance abuse.
2. It was launched by the Ministry for Social Justice & Empowerment.

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

Answer: (c) Both 1 and 2

Explanation:

In NEWS: 5 years of Nasha Mukta Bharat Abhiyaan.

Nasha Mukta Bharat Abhiyaan:

● It was launched on 26 June 2021 (International Day Against Drug Abuse and Illicit Trafficking) by the **Ministry for Social Justice & Empowerment**. **Hence statement 2 is correct.**

● The launch of Nasha Mukta Bharat Abhiyaan (NMBA) is for 272 Districts across 32 State/Union Territories that have been identified as the most vulnerable in terms of usage of drugs in the country.

● These vulnerable districts were identified on the basis of findings from the Comprehensive National Survey and the inputs provided by the **Narcotics Control Bureau (NCB)**.

● According to the National Comprehensive Survey conducted by the Ministry of Social Justice and Empowerment, there are more than 60 million drug users in the country of which a large number of users are in the age group of 10-17 years.

Objectives:

● **Nasha Mukta Bharat Abhiyaan intends to reach out to the masses and spread awareness about substance abuse through various activities like:**

- Awareness generation programmes
- Focus on higher educational Institutions, university campuses and schools
- Reaching out to the Community and identifying dependent population
- Focus on counselling and treatment facilities in hospitals and rehabilitation centres that have been geo-tagged
- Capacity building programmes for service providers

Hence statement 1 is correct.

The Ministry of Social Justice and Empowerment supports organizations that work for preventive education & awareness generation on substance abuse, capacity building, treatment and rehabilitation.

These organizations are:

- **Integrated Rehabilitation Center For Addicts (IRCAs):** are de-addiction centres with inpatient facilities of counselling and treatment for drug dependent persons
- **Community Peer Led Intervention (CPLI):** work with the community supported by youth volunteers for early preventive education, especially for vulnerable adolescents and youth in the community
- **Outreach And Drop In Centres (ODIC):** provide facilities of screening, assessment and counselling along with providing referral & linkage to treatment and rehabilitation services for drug dependents

● **GEO Location:** Ministry supported institutions providing Drug addiction counseling, treatment and rehabilitation and other facilities have been Geo-tagged to make their services accessible and easier to locate

Source: <https://www.india.gov.in/spotlight/nasha-mukt-bharat-abhiyaan>
<https://static.pib.gov.in/WriteReadData/specificdocs/documents/2025/may/doc202556550801.pdf>

6. NAVYA INITIATIVE

6. Consider the following statements:

- I. It is a joint initiative of the Ministry of Social Justice and Empowerment and the Ministry of Women & Child Development.
- II. It aims to empower adolescent girls (AGs) aged 16–18 years in aspirational districts, equipping them with relevant skills for socio-economic independence.

Which of the statements given above is/are correct with respect to the NAVYA initiative?

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

Answer: (b) II only

Explanation:

In NEWS: Objectives of The NAVYA initiative determined

The NAVYA initiative:

● The NAVYA (Nurturing Aspirations through Vocational training for Young Adolescent Girls), a joint initiative of the Ministry of Skill Development & Entrepreneurship and the Ministry of Women & Child Development, was launched in June 2025. **Hence statement I is incorrect.**

● It aims to empower adolescent girls (AGs) aged 16–18 years in aspirational districts by equipping them with relevant skills for socio-economic independence. **Hence statement II is correct.**

● Emphasizes non-traditional and emerging job roles—breaking stereotypes and opening new avenues for girls.

● Under the NAVYA initiative, it has been decided to train 3850 adolescent girls under Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0) in non-traditional and modern job roles such as digital marketing, cybersecurity, AI-enabled services, green jobs, and other emerging sectors. Further, training in life skills, financial literacy, and digital competence is to be provided to equip them for both current and future workforce demands.

The objective of initiative includes:

- Provide demand-driven vocational training aligned with traditional and non-traditional sectors.
- Facilitate holistic development through modules on health, nutrition, hygiene, financial literacy, life skills, and legal awareness.
- Promote employability, self-employment, and forward linkages such as internships, apprenticeships, and job opportunities.
- Strengthen gender-inclusive skilling and create a safe, supportive training environment.
- Bridge the gap between education and livelihood, particularly for girls in underserved and remote areas.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2157512>

7. NAMASTE Scheme

7. With reference to the NAMASTE Scheme, consider the following statements:

1. NAMASTE Scheme is a Centrally Sponsored Scheme launched jointly by the Ministry of Social Justice & Empowerment (MoSJE) and the Ministry of Housing & Urban Affairs (MoHUA)
2. It aims to eliminate manual scavenging and improve the safety, dignity, and livelihoods of sanitation workers.
3. It also provides capital subsidies up to ₹5 lakh for procurement of sanitation-related vehicles and equipment to support mechanization
4. In India July 16 is commemorated as "NAMASTE Day"

Which of the statements given above is/are correct?

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

Answer: (c) 2, 3 and 4 only

Explanation:

In NEWS: Under the NAMASTE scheme, 85,819 Sewer & Septic Tank Workers have been profiled so far

NAMASTE Scheme:

- NAMASTE (National Action for Mechanised Sanitation Ecosystem) is a Central Sector Scheme launched in 2023–24, jointly formulated by the Ministry of Social Justice & Empowerment (MoSJE) and the Ministry of Housing & Urban Affairs (MoHUA), aiming to eliminate manual scavenging and improve the safety, dignity, and

livelihoods of sanitation workers. **Hence statement 1 is incorrect and statement 2 is correct.**

Objectives & Vision:

- Zero fatalities in sanitation work, ensuring no worker directly comes into contact with human waste.
- Mechanised and safe cleaning of sewers and septic tanks, conducted by trained and certified sanitation workers.
- Empowerment of workers through Self-Help Groups (SHGs) and "Sanipreneurship", promoting entrepreneurship in sanitation services.
- Formalization and rehabilitation of Manual Scavengers (MS) and Sewer/Septic Tank Workers (SSWs).

Key Components

- Digital profiling via a mobile app to identify and validate SSWs across Urban Local Bodies (ULBs), assigning them a unique NAMASTE ID.
- Provision of occupational safety training, Personal Protective Equipment (PPE) kits, and health insurance under Ayushman Bharat–PMJAY (AB-PMJAY).
- Capital subsidies (including up to ₹5 lakh) for procurement of sanitation-related vehicles and equipment to support mechanization. **Hence statement 3 is correct.**
- Strengthening of Emergency Response Sanitation Units (ERSUs) and conducting IEC campaigns to raise awareness about safety and dignity in sanitation work.

Inclusion of Waste Pickers (since Financial Year 2024–25)

- The scheme now officially includes waste pickers alongside SSWs. They receive digital registration, PPE kits, safety training, health insurance (AB-PMJAY), registration on the e-Shram portal, pre-matric scholarships for their children, and access to capital subsidies for waste collection vehicles.

Progress & Recent Developments

- As of March 2025, 66,961 sewer and septic tank workers have been validated under the scheme — a 22.7% increase from 54,574 in December 2024.
- 45,292 PPE kits were distributed by March 2025, compared to 16,791 by December 2024 — a 170% increase.
- Capital subsidies worth ₹17.23 crore were released for 599 workers by March 2025, up from ₹13.96 crore for 503 workers in December 2024.
- Workshops on safe sanitation practices also grew from 837 (Dec 2024) to 1,837 (Mar 2025).
- On July 16, commemorated as "NAMASTE Day," a helpline (14473) was launched for waste pickers. PPE kits and Ayushman cards were distributed, and support was given to bolster the scheme's reach. **Hence statement 4 is correct.**

PYQ REFERENCE:

Q. Consider the following statements:

1. The India Sanitation Coalition is a platform to promote sustainable sanitation and is funded by the Government of India and the World Health Organization.
2. The National Institute of Urban Affairs is an apex body of the Ministry of Housing and Urban Affairs in Government of India and provides innovative solutions to address the challenges of Urban 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.pib.gov.in/PressReleasePage.aspx?PRID=2160203>

8. 'One Nation, One Subscription' (ONOS)

8. Which of the following best describes the objective of the "One Nation One Subscription (ONOS)" scheme?

- (a) To provide free access to e-learning platforms in all languages.
(b) To provide nationwide access to international journals and research articles through a centralized subscription.
(c) To ensure one unified subscription for newspapers and magazines across India.
(d) To provide cloud storage solutions to all Indian universities.

Answer: (b) To provide nationwide access to international journals and research articles through a centralized subscription.

Explanation:

In NEWS: With Sci-Hub gone, will the 'One Nation, One Subscription' scheme step up?

'One Nation, One Subscription' (ONOS):

- The Government of India approved One Nation One Subscription scheme to provide country-wide access to international high impact scholarly research articles and journal publications to students, faculty and researchers of all Higher Education Institutions managed by the central government and state governments and Research & Development Institutions of the central government.

Hence option (b) is correct.

- The One Nation One Subscription (ONOS) intends to acquire national licenses for e-journal/database subscriptions from most of the prominent journal publishers.

- A total of 30 major international journal publishers have been included in ONOS.
- All the journals published by these publishers will be accessible to the students, faculty members and researchers of the participating institutions.
- The initiative will open a goldmine of knowledge available in top quality scholarly journals to nearly 1.8 crore students, faculty members, researchers and scientists of all disciplines, including those in tier 2 and tier 3 cities, thereby encouraging core as well as interdisciplinary research in the country.
- Access to journals are being provided through national subscription coordinated by the Information and Library Network (INFLIBNET) Centre, an autonomous inter-university centre of the University Grants Commission (UGC), Gandhinagar, Gujarat.
- The Department of Higher Education, Government of India will have a unified portal "One Nation One Subscription" (<https://www.onos.gov.in/>) through which the institutions will be able to access the journals.
- The ANRF will periodically review the usage of One Nation One Subscription and publications of Indian authors of these institutions.
- One Nation One Subscription is a timely step towards establishing India in the global research ecosystem by bringing ease of doing research to the doorstep of all students, faculty members and researchers in the government institutions.

Source: THE HINDU - TEXT & CONTEXT

<https://www.india.gov.in/spotlight/one-nation-one-subscription#:~:text=In%20response%20to%20the%20vision%20of%20making%20India,Research%20%26%20Development%20Institutions%20of%20the%20central%20government.>

SCIENCE & TECHNOLOGY

1. Leap-1 Mission

1. What is the purpose of the 'Leap-1 Mission'?

- (a) Processing satellite data in space and retraining AI models for near-real-time insights.
(b) To study the effect of solar flares on our communication systems
(c) Studying glacier melting with a collection of Earth Observation satellites
(d) Space-based plant cultivation for developing long-term human presence beyond Earth.

Answer: (a) Processing satellite data in space and retraining AI models for near-real-time insights.

Explanation:

In NEWS: Dhruva Space to launch LEAP-1 aboard SpaceX's Falcon 9

Leap-1 Mission:

- It is Dhruva Space's (India's space-tech startup) first commercial satellite mission, transitioning from tech demonstrations to operational, customer-centric satellite deployments
- The mission carries payloads for AI and Earth observation
- Symbolizes a rising trilateral strategic partnership between India, Australia, and the U.S. in the commercial space domain
- Demonstrates India's growing private-sector capabilities in satellite engineering, payload hosting, and space services.
- Targets impactful applications across defense, disaster response, agriculture, mining, and environmental monitoring

Missions Onboard

Akula Tech – Nexus-01

- Payload: Advanced AI module for on-board data processing. **Hence option (a) is correct.**
- Features:
 - AI/ML model optimisation & compression for edge computing in space.
 - Real-time processing for time-critical missions (e.g., fire detection, anomaly detection, spectral analysis).
 - Models continuously retrain on live sensor data.
- Enables autonomous "swarm" Earth Observation satellites.

Esper Satellites – OTR-2

- Payload: Hyperspectral imager.
- Capability: Produces highly detailed, spectrally rich Earth Observation (EO) data.
- Applications: Agriculture, mining, disaster response, environmental monitoring, defence.

Supporting Services

- Ground Station-as-a-Service (GSaaS) – satellite communications support.
- Integrated Space Operations & Command Suite (ISOCS) – real-time mission management & payload data downlink.

PYQ REFERENCE:

Q. What is the purpose of 'evolved Laser Interferometer Space Antenna' (eLISA) project?

- (a) To detect neutrinos
- (b) To detect gravitational waves**
- (c) To detect the effectiveness of missile defence system
- (d) To study the effect of solar flares on our communication systems

Source:

<https://www.thehindubusinessline.com/news/science/dhruva-space-to-launch-leap-1-aboard-spacexs-falcon-9/article69892511.ece>

2. Solar PV Module

2. Consider the following statements:

1. The solar PV modules directly convert sunlight into electricity through the thermoelectric effect.
2. The solar PV modules are made up of Silicon crystals.

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: India Achieves Historic Milestone of 100 GW Solar PV Module Manufacturing Capacity under ALMM

Solar PV Modules: harnessing the sun's power

- Solar PV modules, also known as solar panels, are the core components of solar power systems, directly converting **sunlight into electricity** through the **photovoltaic effect**. **Hence statement 1 is incorrect.**
- They are composed of individual solar cells, typically made from **silicon**, connected together and encased in a protective frame. **Hence statement 2 is correct.**

ALMM (Approved List of Models and Manufacturers):

- ALMM is a government initiative that lists solar PV modules and manufacturers meeting specific quality and performance standards.
- It aims to ensure quality, reliability, and promote domestic manufacturing under the government's Make in India push.

Key features and benefits

- **Renewable & Sustainable Energy:** They utilize sunlight, a clean and inexhaustible energy source, reducing dependence on fossil fuels and mitigating climate change.
- **Cost Savings:** Long-term savings on electricity bills can be substantial, especially in areas with high electricity rates.
- **Reduced Carbon Footprint:** Generating electricity with PV modules produces no greenhouse gas emissions, making them environmentally friendly.

- **Durability and Low Maintenance:** Designed to withstand various weather conditions, including extreme temperatures, heavy rain, snow, and strong winds, they require minimal maintenance and have a lifespan of 25-30 years.

- **Versatility and Scalability:** Available in various sizes and power ratings, they can be deployed in diverse applications, from small rooftop systems to large solar farms, and scaled to meet different energy demands.

Efficiency

- Solar module efficiency typically ranges from 15% to 22%, with some commercially available modules exceeding 24%. However, it's crucial to remember that module performance depends on various factors beyond nominal efficiency, such as temperature, lighting conditions, and potential shading.

Applications

- **Residential and Commercial Rooftops:** For homes and businesses seeking to reduce electricity bills and increase energy independence.

- **Ground-mounted Installations:** Large-scale solar farms for utility-scale power generation.

- **Remote Locations:** Providing power where there is no access to the electricity grid, such as for cabins or remote sensing equipment.

- **Agriculture:** Powering irrigation systems, water pumps, and other farm operations.

- **Specialty Applications:** Including agrivoltaics, solar canopies, and powering electric vehicles.

PYQ REFERENCE:

Q. With reference to solar power production in India, consider the following statements:

1. India is the third largest in the world in the manufacture of silicon wafers used in photovoltaic units.
2. The solar power tariffs are determined by the Solar Energy Corporation 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/india-achieves-landmark-milestone-of-100-gigawatt-of-solar-photovoltaic-modules-manufacturing-capacity/#:~:text=India%20has%20achieved%20a%20landmark%20milestone%20of%20100,remarkable%20leap%20from%20just%202.3%20GW%20in%202014.>

3. SabhaSaar

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

- (a) It is a procedure for considering ecological costs of developmental schemes formulated by the Government.
- (b) It is a scheme of RBI for reworking the financial structure of big corporate entities facing genuine difficulties.
- (c) It is a disinvestment plan of the Government regarding Central Public Sector Undertakings.
- (d) It is an AI-powered meeting summarization tool developed by the Ministry of Panchayati Raj (MoPR) in India.

Answer: (d) It is an AI-powered meeting summarization tool developed by the Ministry of Panchayati Raj (MoPR) in India

Explanation:

In NEWS: AI Powered Tool to Fast-Track Gram Sabha Meeting Summaries

SabhaSaar:

- SabhaSaar is an AI-powered meeting summarization tool developed by the Ministry of Panchayati Raj (MoPR) in India. **Hence option (d) is correct.**
- **Purpose:** It is designed to automatically generate structured Minutes of Meeting (MoM) from Gram Sabha or other Panchayat meetings' audio and video recordings.
- **Technology:** SabhaSaar uses AI and Natural Language Processing (NLP) to transcribe discussions, identify key points, and create meeting minutes.
- **Language Support:** Integrated with Bhashini, it supports 13 Indian languages with plans for expansion.
- **Objectives:** The tool aims to streamline meetings, improve efficiency, and enhance transparency in Panchayat functioning.
- **Implementation:** MoPR has encouraged all States and Union Territories to use SabhaSaar for special Gram Sabhas on August 15, 2025. Tripura was the first state to adopt it.
- **Benefits:** SabhaSaar is expected to save officials time, allowing them to focus on governance and service delivery while maintaining transparency and accountability. This initiative aims to strengthen participatory democracy and enhance local governance through digital innovation.

PYQ REFERENCE:

Q. 'SWAYAM', an initiative of the Government of India, aims at

- (a) promoting the Self Help Groups in rural areas
- (b) providing financial and technical assistance to young start-up entrepreneurs
- (c) promoting the education and health of adolescent girls
- (d) providing affordable and quality education to the citizens for free**

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2156248>

4. Mission Sudarshan Chakra

4. Consider the following statements with respect to Mission Sudarshan Chakra:

- I. It aims to develop an indigenous, multi-layered air and missile defense shield.
- II. Project Kusha, an Extended-Range Air Defence System (ERADS) is a key component of the mission.

Which of the above statements is/are correct?

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

Answer: (c) Both I and II

Explanation:

In NEWS: Prime Minister Narendra Modi made a strong pitch with policy prescriptions for economic- and security-related reforms for self-reliance in his Independence Day address.

Mission Sudarshan Chakra:

- On August 15, 2025, Prime Minister Narendra Modi unveiled "Mission Sudarshan Chakra" during the Independence Day address—an ambitious 10-year initiative aiming for completion by 2035.
- The mission envisions an indigenous, multi-layered air and missile defense shield—similar to Israel's Iron Dome or the U.S. Golden Dome—to protect strategic, civilian, and religious sites across India. **Hence statement I is correct.**
- The system will not just intercept threats—it is designed to strike back at adversaries, combining defensive interception with counter-strike capabilities.
- Stressed as a fully Atmanirbhar Bharat (self-reliant India) project, the entire system—from research and development to manufacturing—will be developed through Indian expertise and technology.

Core Components & Capabilities

- **Sensor & Command Network:** Mission Sudarshan Chakra will integrate a network of early-warning sensors, radars, airborne detection systems, guided by AI-enabled command & control centers, creating real-time threat awareness and coordinated responses.
- **Interceptor Batteries:** The system will deploy both land- and sea-based interceptor missiles and potential offensive payloads to neutralize incoming threats across multiple domains.
- **Project Kusha:** A cornerstone of the mission—Project Kusha is an Extended-Range Air Defence System (ERADS) featuring modular interceptor variants (M1, M2, M3) with ranges from 150 km up to 400 km. Equipped with dual-seeker (radar + infrared) technologies and AI decision support, it's scheduled for deployment between 2028–2030. **Hence statement II is correct.**
- **Existing Systems Integration:** The mission builds upon current defense infrastructure:
 - IACCS (Integrated Air Command and Control System)
 - S-400 (Sudarshan Chakra) system
 - Akash Prime missile
 - Barak-8
 - These will be integrated with Project Kusha and new technologies under the Mission.
- **Cyber & Hybrid Security:** The project plans to include components for cybersecurity, addressing evolving threats like hacking, phishing, and cyber sabotage. Surveillance, physical, and digital defenses will be unified under one system.

Source:

<https://www.thehindu.com/news/national/pm-modi-i-day-speech-self-reliance-is-not-limited-to-import-export-but-linked-to-our-own-strengths-and-capabilities/article69935906.ece>

5. e-Jagriti platform

5. The e-Jagriti platform, recently seen in the news is a

- (a) a flagship initiative by the Department of Higher Education to maintain a uniform database for the Academic Bank of Credit.
- (b) a flagship initiative by the Department of Consumer Affairs aimed at strengthening the consumer dispute redressal system across the country.
- (c) a flagship initiative by the Department of Revenue created for the online payment of direct taxes.
- (d) a flagship initiative by the Department of culture to promote intangible cultural heritage through an online repository of performances across India.

Answer: (b) a flagship initiative by the Department of Consumer Affairs, aimed at strengthening the

consumer dispute redressal system across the country.

Explanation:

In NEWS: National Consumer Disputes Redressal Commission along with 10 States Achieve Over 100% Disposal Rate of Consumer Cases in July 2025

- Over two lakh users including **NRIs registers on e-Jagriti platform** since its launch 85,531 cases filed on e-Jagriti this year alone

e - Justice And Grievance Redressal through

Information Technology and Innovation (e-Jagriti):

- e-Jagriti is a **flagship initiative by the Department of Consumer Affairs**, Government of India, aimed at **strengthening the consumer dispute redressal system** across the country. **Hence option (b) is correct.**

- The project focuses on the computerization and networking of all Consumer Commissions at the national, state, and district levels to **ensure transparency, efficiency, and speedy resolution of consumer disputes.**

- **e-Jagriti enables consumers to file complaints, track case statuses, and access judgments online.**

- The platform plays a vital role in digitizing consumer commissions and empowering citizens by providing easy access to legal remedies.

- With its user-friendly interface and real-time updates, e-Jagriti **ensures accountability, reduces paperwork, and fosters a more transparent and accessible justice system** for consumers nationwide.

- Designed to enhance accessibility, transparency, and efficiency, the platform integrates legacy systems such as OCMS, e-Daakhil, NCDRC CMS, and the CONFONET portal into a single seamless interface, eliminating fragmentation for users.

- Now operational at the NCDRC and across all 36 States and Union Territories.

- e-Jagriti stands out for its inclusive, citizen-centric design, offering digital case filing, document exchange, virtual hearings, real-time SMS and email updates, multilingual support, chatbot assistance, and voice-to-text features to aid visually challenged and elderly users.

- It provides dedicated modules for advocates to track cases, receive hearing alerts, upload documents, and verify credentials through Bar Council integration, while judges gain secure access to complete digital case files, smart court calendars, analytics dashboards, and virtual courtrooms for faster, remote hearings, reducing reliance on physical infrastructure.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2157241#:~:text=The%20Department%20of%20Consumer%20Affairs%2C%20Ministry%20of%20Consumer,to%20transform%20consumer%20grievance%20redressal%20across%20the%20country.>

6. Rubella Elimination

6. Consider the following statements:

Statement I: India became the sixth country in WHO South-East Asia to achieve rubella elimination

Statement II: A vaccine for Rubella has been given under the Universal Immunisation Programme (UIP) 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: (d) Statement I is not correct but Statement II is correct

Explanation:

In NEWS: Nepal declared free of rubella as a public health problem: WHO

Rubella elimination:

Nepal is the sixth country in WHO South-East Asia to achieve rubella elimination. **Hence statement I is not correct.**

Bhutan, DPR Korea, Maldives, Sri Lanka, Timor-Leste, and now Nepal, have eliminated rubella.

Rubella:

- Rubella, also known as German measles, is a viral infection typically characterized by a mild rash, fever, and swollen lymph nodes.
- Rubella is caused by the rubella virus, which is transmitted through respiratory droplets from infected individuals.
- It is usually not serious in children, but it can cause severe birth defects if a pregnant woman is infected.
- The virus is spread through the air via droplets from coughs or sneezes.

Congenital Rubella Syndrome (CRS):

Congenital Rubella Syndrome (CRS): If a pregnant woman contracts rubella, particularly during the first trimester, it can cause miscarriage, stillbirth, or severe birth defects in the baby, including intellectual disability, cataracts, deafness, and heart abnormalities.

Prevention:

MMR vaccine:

- The measles-mumps-rubella (MMR) vaccine is highly effective in preventing rubella.
- The MMR vaccine is typically given in two doses, usually at 12-15 months and 4-6 years of age.

Pregnant women:

- It's crucial for women planning to conceive to ensure they are immune to rubella, either through vaccination or prior infection.

Treatment:

- There is no specific treatment for rubella, as it is a viral infection.
- Treatment focuses on managing symptoms, such as fever and pain, with over-the-counter medications like acetaminophen or ibuprofen.

Status of Rubella in India:

- Two doses of MR vaccine (Measles-Rubella) are given under the Universal Immunisation Programme (UIP).

Hence statement II is correct.

- India launched the National Zero MR Campaign in 2025.
- Rubella cases dropped 17% compared to 2023.
- India got a global award for its efforts in 2024.
- India aims to eliminate rubella by 2026.
- Target: More than 95% vaccination coverage in all areas.

Source:

https://www.downtoearth.org.in/health/nepal-declared-free-of-rubella-as-a-public-health-problem-who#google_vignette

7. Entangled clocks

7. The term 'W State' is related to

- (a) Cloud computing
- (b) Entangled atomic clocks
- (c) Visible Light Communication Technologies
- (d) Wireless Communication Technologies

Answer: (b) Entangled atomic clocks

Explanation:

In NEWS: Entangled clocks may reveal where quantum physics and gravity meet

- One of the deepest puzzles in modern science is how **quantum mechanics and general relativity** — the two great pillars of 20th century physics — fit together. Quantum mechanics governs the microscopic world of atoms and subatomic particles. General relativity describes gravity and the structure of spacetime. Both

theories are stunningly successful in their domains, but they don't yet combine into a single unified framework.

Entangled clocks:

- Entangled clocks are a groundbreaking advancement in timekeeping technology that utilize the principles of quantum entanglement **to achieve unprecedented levels of precision.**
- The term "**W State**" comes from quantum mechanics and refers to a specific type of entangled quantum state involving three or more particles (such as atoms, qubits, or clocks).
- This field is rapidly developing and holds the potential to revolutionize various applications, from navigation to fundamental physics research.

Quantum Entanglement and Timekeeping:

Traditional Atomic Clocks:

- These clocks rely on the precise frequency of atomic transitions, but are limited by the standard quantum limit, which introduces inherent uncertainty.

Entanglement:

- Entanglement allows for the creation of a shared quantum state between multiple particles, where the properties of these particles are correlated, regardless of the distance separating them.

Entangled Clocks:

- By entangling multiple atomic clocks or particles, scientists can create a system where the individual uncertainties of each component are averaged out, leading to a more stable and accurate overall measurement of time.

PYQ REFERENCE:

Q. Which one of the following is the context in which the term "qubit" is mentioned?

- (a) Cloud Services
- (b) Quantum Computing**
- (c) Visible Light Communication Technologies
- (d) Wireless Communication Technologies

Source: <https://www.thehindu.com/sci-tech/science/entangled-clocks-may-reveal-where-quantum-physics-and-gravity-meet/article69950268.ece>

8. Agni-5

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

1. It is an intercontinental ballistic missile.
2. It has the capability to carry a nuclear warhead
3. India becomes the first country to have demonstrated its capability with MIRV (Multiple Independently Targetable Re-entry Vehicles) through Agni V.

How many of the statements given above are correct?

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

Answer: (b) Only two

Explanation:

In NEWS: India successfully test-fires Agni-5 intermediate-range ballistic missile

Agni-5 Missile:

● Agni-5 is an **intercontinental ballistic missile (ICBM)** developed by India's Defence Research and Development Organisation (DRDO). **Hence statement 1 is correct.**

- It has a range of over 5,000 km, capable of reaching targets across Asia, parts of Europe, and Africa.
- Agni-5 is part of India's Agni missile series, which includes Agni-1 to Agni-5, designed for nuclear deterrence and strategic defense.
- It is a **three-stage, solid-fueled, canisterised missile**, making it road-mobile, easy to transport, and ready for quick launch.
- The missile **can carry a nuclear warhead** weighing around 1,500 kg. **Hence statement 2 is correct.**
- Agni-5 enhances India's second-strike capability, aligning with its No First Use (NFU) nuclear policy.
- The missile was first successfully test-fired in April 2012.
- It was most recently test-fired on August 20, 2025, from the Integrated Test Range, Chandipur, validating all technical parameters.
- The March 2024 test of Agni-5 demonstrated its capability with **MIRV (Multiple Independently Targetable Re-entry Vehicles)** — a major technological advancement.
- MIRV allows a single missile to carry multiple warheads, each capable of hitting different targets independently, making the system more effective and harder to intercept.

- With MIRV technology, Agni-5 places India among an elite group of countries such as the United States, Russia, and China. **Hence statement 3 is incorrect.**
- Agni-5 is operated by the Strategic Forces Command (SFC) under the Nuclear Command Authority (NCA) of India.
- The missile is considered a critical component of India's credible minimum deterrence strategy against regional and strategic threats.

Feature	Agni-1	Agni-2	Agni-3	Agni-4	Agni-5
Range	~700 km	~2,000–2,500 km	~3,000–3,500 km	~3,500–4,000 km	5,000+ km
Warhead Type	Nuclear /Conventional	Nuclear	Nuclear	Nuclear	Nuclear (with MIRV)
Propulsion	Solid fuel	Solid fuel	Solid fuel	Solid fuel	Solid fuel
Stages	Single-stage	Two-stage	Two-stage	Two-stage	Three-stage
Launch Platform	Road-mobile	Rail/Road mobile	Rail/Road mobile	Road-mobile	Canisterised/Road-mobile
First Test	2002	1999	2006	2011	2012

PYQ REFERENCE:

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

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

Select the correct answer using the codes given below.

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

Source: <https://www.thehindu.com/sci-tech/science/india-successfully-test-fires-agni-5-ballistic-missile-from-odisha/article69956842.ece>

9. National Supercomputing Mission

9. Consider the following statements:

1. India's first supercomputer, PARAM 8000 was developed by C-DAC in 1991.
2. In 2024, India launched its fully indigenous PARAM Rudra supercomputers under the National Supercomputing Mission.

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: National Supercomputing Mission Powers India's Research Ecosystem with 37 Systems, 40 Petaflops Capacity, Supporting Over 10,000 Researchers Across Diverse Fields

National Supercomputing Mission (NSM)

- National Supercomputing Mission (NSM) has been set up to provide the country with supercomputing infrastructure to meet the increasing computational demands of academia, researchers, MSMEs, and startups.
- It is a first of its kind attempt to boost the country's computing power.
- National Super Computing Mission is steered jointly by the Department of Science and Technology (DST) and Ministry of Electronics and IT (MeitY) and implemented by the Centre for Development of Advanced Computing (C-DAC), Pune and the Indian Institute of Science (IISc), Bengaluru.
- Impact Areas: Drug discovery, Climate modelling, Astronomy & Cosmology, Fluid dynamics, Computational chemistry, Disaster management, Energy security and Advanced materials research

Vision & Objectives

- Establish self-reliance in high-performance computing (HPC)
- Provide cutting-edge supercomputing access to Indian researchers
- Strengthen India's position in global supercomputing
- Support scientific research, industrial R&D, and national priorities

Deployment & Utilization

- 37 supercomputers installed (as of August 12, 2025)
- Total Compute Power: 40 Petaflops

- Locations: IISc, IITs, R&D labs, and institutions across Tier-II and Tier-III cities
- Usage Efficiency: Over 85%, many over 95%

Historical Timeline:

- | Year | Milestone |
|-------------|---|
| ● 1980s | - India faces denial of supercomputers from advanced nations. |
| ● 1988 | - Govt of India initiates indigenous supercomputer development. |
| ● 1991 | - PARAM 8000 developed by C-DAC – India's first supercomputer. Hence statement 1 is correct. |
| ● 1998 | - PARAM 10000 launched – entered the global supercomputing race. |
| ● 2002-2013 | - Further developments include PARAM Padma, SAGA-220, and EKA (Tata CRL). |
| ● 2015 | - Launch of National Supercomputing Mission (NSM) to boost HPC infrastructure. |
| ● 2024 | - Launch of fully indigenous PARAM Rudra supercomputers under NSM. Hence statement 2 is correct. |

Indigenous Technological Achievements in supercomputers:

- PARAM Rudra Supercomputers (Dedicated in Sept 2024 by PM Modi):
 - Built with indigenous "Rudra" HPC servers
 - Deployed at:
 - GMRT – NCRA, Pune
 - IUAC, Delhi
 - S.N. Bose National Centre, Kolkata
 - Used for advanced research in physics, earth sciences, and cosmology
- Trinetra Network:
 - High-speed (40 Gbps and 100 Gbps) interconnect developed indigenously
- Software Stack:
 - Fully designed and developed in India
 - Achieves technological self-sufficiency in supercomputing

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2158517>

10. Deuterium

10. With reference to Deuterium , consider the following statements:

- I. Deuterium is a stable isotope of hydrogen.
- II. Deuterium is radioactive and occurs naturally in water.
- III. H₂S-H₂O Bi-Thermal chemical exchange technology is one of the methods used in extracting deuterium.
- IV. Deuterium is used as a key fuel for fusion reactions
- V. A Deuterium Extraction plant is located on the Godavari river at Manuguru, Telangana.

How many of the above statements are correct?

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

Answer: (c) Only four

Explanation:

In NEWS: PARLIAMENT QUESTION: UTILISATION OF DEUTERIUM IN THE GODAVARI RIVER

Deuterium:

- Deuterium (D or ²H) is a **stable isotope of hydrogen**, containing:
 - 1 proton
 - 1 neutron **Hence statement I is correct.**
- This makes it twice as heavy as regular hydrogen (which has only 1 proton).
- Deuterium is **non-radioactive**, and occurs naturally in water in small amounts (about 1 atom per 6,500 hydrogen atoms). **Hence statement II is incorrect.**
- When two deuterium atoms bond with an oxygen atom, they form Deuterium Oxide (D₂O), commonly called **heavy water**.
- Deuterium extraction is the process of separating and concentrating deuterium (²H or D) from natural water, where it exists in trace amounts (~0.0156%).
- The goal is to produce Deuterium Oxide (D₂O), also called heavy water, for use in nuclear reactors and scientific applications.
- **H₂S-H₂O Bi-Thermal chemical exchange technology** is employed for extraction of Deuterium from **Godavari river water at Manuguru, Telangana. Hence statement V is correct.**
- Another plant based on similar technology is in operation at **Kota, Rajasthan** for the extraction of Deuterium from the **waters of Rana Pratap Sagar Lake.**

Uses of Deuterium:

- Heavy water (D₂O) is used as a moderator and coolant in Pressurized Heavy Water Reactors (PHWRs).
- Deuterium slows down neutrons without absorbing them, allowing reactors to use natural uranium as fuel.
- Deuterium is a key fuel for fusion reactions (e.g., D-T fusion: Deuterium + Tritium). **Hence statement IV is correct.**
- Fusion reactors like ITER plan to use it as a future clean energy source.
- Deuterium-labeled compounds are used in tracer studies, NMR spectroscopy, and drug metabolism studies.
- Used in deuterated drugs to alter metabolism rates.
- Helps in mass spectrometry and clinical research.

Common Deuterium Extraction Methods:

- H₂S-H₂O Bi-Thermal Chemical Exchange Process **Hence statement III is correct.**
- Girdler Sulfide Process (GS Process)
- Cryogenic Distillation
- Ammonia-Hydrogen Exchange Process

PYQ REFERENCE:

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

1. Monazite is a source of rare earths.
2. Monazite contains thorium.
3. Monazite occurs naturally in the entire Indian coastal sands in India.
4. In India, Government bodies only can process or export monazite.

Which of the statements given above are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2159361>

11. National Space Day 2025

11. Consider the following statements:

Statement I: The National Space Day is celebrated across India on August 23rd every year.

Statement II: On this day in 2023, the Chandrayaan-3 mission accomplished the safe and soft landing of the Vikram Lander on the lunar surface.

Statement III: The theme for this year's celebration is "Aryabhatta to Gaganyaan: Ancient Wisdom to Infinite Possibilities"

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (b) Both Statement II and Statement III are correct but only one of them explains Statement I

Explanation:

In NEWS: Prime Minister Shri Narendra Modi's address on the occasion of National Space Day 2025

National Space Day:

- The second National Space Day is being celebrated across the country this year on August 23rd.
- The day commemorates the successful soft landing of the Chandrayaan-3 Mission's Vikram Lander and the deployment of the Pragyan Rover on the Moon on 23rd of August 2023.
- **On this day in 2023, the Chandrayaan-3 mission accomplished the safe and soft landing of the Vikram Lander on the lunar surface.**
- With this, India became the fourth country to land on the moon and the first to land near the southern polar region of the moon.
- The soft landing was followed by a successful deployment of the Pragyaan Rover. The landing site was named Shiv Shakti Point.
- To honour this achievement, the Government of India officially declared August 23rd as "National Space Day."
- The theme for this year's celebration is "Aryabhata to Gaganyaan: Ancient Wisdom to Infinite Possibilities".

Hence both Statement II and Statement III are correct but only one of them explains Statement I

Recent Milestones:

- **South Pole of the Moon (2023):** India became the first nation to land there.
- **Docking/Undocking Capability:** India is the 4th country to achieve this.
- Group Captain **Shubhanshu Shukla** unfurled the national flag aboard the International Space Station.

Future Missions:

- India is preparing to launch the **Gaganyaan Mission** soon.
- A dedicated **Astronaut Pool** is being developed to encourage youth participation.

- India will establish its **own space station** in the coming years.
- Exploring **deeper regions of space** is India's next frontier.

Technology & Innovation:

- Rapid progress in semi-cryogenic engines and electric propulsion.
- Over 350 space-tech startups are actively contributing.
- The first PSLV rocket built by private industry will be launched soon.
- A Private Communication Satellite and Earth Observation Constellation are under development.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2160045>

12. Sustainable Power 1404' exercise

12. Which of the following statements about 'Sustainable Power 1404' exercise' are not correct?

1. The "Sustainable Power 1404" naval exercise is conducted by Israel to showcase missile launches, warship maneuvers, and electronic warfare assets.
2. It took place across the Gulf of Oman and the Mediterranean Sea.

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: Iran's navy launches first military drill since 12-day war with Israel

Sustainable Power 1404' exercise:

- The "Sustainable Power 1404" naval exercise conducted by Iran — showcasing missile launches, warship maneuvers, and electronic warfare assets. **Hence statement 1 is incorrect.**
- Held in August 2025, this exercise marks Iran's first major military drill since the 12-day war with Israel in June 2025, during which Iran's air defense systems and nuclear facilities suffered significant damage
- It served as a strategic demonstration of Iran's military resilience, deterrence posture, and operational recovery

Scope & Theatre of Operations

- The two-day naval exercise took place across the Gulf of Oman and the northern Indian Ocean, underlining Iran's intent to display naval strength beyond its littoral waters.

Hence statement 2 is incorrect.

Participating Assets & Strike Systems

Key naval vessels involved:

- IRIS Sabalan (Moudge-class frigate)
- IRIS Ganaveh (missile-launching corvette)

Armaments deployed:

- Nasir: short-range, maneuverable cruise missile (~90 km)
- Qadir: long-range, radar-evading cruise missile (~300 km)
- Qader: medium-range anti-ship missile with radar-evading capability (~300 km)

Integrated Warfare Components

- The drill incorporated a wide spectrum of domains:
- Surface and subsurface (possibly submarines) naval units
- Air units, coastal missile batteries, and electronic warfare brigades
- Drones and UAV reconnaissance
- Anti-submarine tracking and electronic/cyber countermeasures
- Involvement of the Bavar-5 kamikaze drone as reported

PYQ REFERENCE:

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

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

Select the answer using the code given below:

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

Source:

<https://www.thehindu.com/news/international/irans-navy-launches-first-military-drill-since-12-day-war-with-israel/article69961248.ece>

13. Gaganyaan mission

13. With reference to the 'Gaganyaan mission', consider the following statements:

1. It is India's first human spaceflight programme launched by the DRDO
2. It encourages and supports microgravity research
3. It is supported by the IAF, Roscosmos, and ESA.
4. India will become the 4th nation after Russia, USA, and China to send humans into space indigenously.

How many of the above statements are correct?

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

Answer: (c) Only three

Explanation:

In NEWS: ISRO holds air-drop test for Gaganyaan mission



Integrated Air Drop Test (IADT-1)

- ISRO successfully conducted its first Integrated Air Drop Test (IADT-1) on 24 August 2025 as part of the Gaganyaan human spaceflight programme.
- The IADT was aimed at end-to-end demonstration of the parachute-based deceleration system for safe crew module recovery.
- A dummy crew capsule weighing ~5 tonnes was airlifted by an IAF Chinook helicopter and released from altitude.
- The capsule's parachutes deployed in sequence during descent, reducing its speed for a safe splashdown.
- During actual Gaganyaan missions, parachutes will deploy after atmospheric re-entry, following deceleration by heat shields and drogue parachutes.
- The test was a coordinated effort involving ISRO, IAF, DRDO, Indian Navy, and Coast Guard.

Gaganyaan Mission

- Launched by ISRO – India’s first human spaceflight programme. **Hence statement 1 is incorrect.**
- Aim: To demonstrate human spaceflight capability by sending a crew of 2–3 astronauts into a Low Earth Orbit (LEO) of ~400 km for 3 days and safely return to Earth.
- Approved by the Union Cabinet in 2018 with an outlay of ~₹10,000 crore.
- Timeline: First uncrewed mission (G1) expected before the manned mission (target: mid-2020s).
- It encourages and supports microgravity research.

Hence statement 2 is correct.

Objectives

- To establish India’s ability to launch humans into space using indigenous systems.
- Develop technologies for crew safety, life support, re-entry, and recovery.
- Promote Atmanirbhar Bharat in advanced space technologies.
- Boost national prestige and open pathways for future deep space missions.

Key Components

- Crew Module (CM): Pressurised capsule carrying astronauts, equipped with life support & safety systems.
- Service Module (SM): Provides power, propulsion, thermal control, and support.
- Crew Escape System (CES): Ensures astronaut safety in case of launch emergency.
- Launch Vehicle: Human-rated LVM3 (formerly GSLV Mk-III) with enhanced safety features.
- Parachute Recovery System: Tested through IADT-1 (Aug 2025) for safe splashdown in sea.

Preparatory Tests

- Pad Abort Test (2018) – validated Crew Escape System.
- Test Vehicle Missions (TV-D1, TV-D2, etc.) – validate crew safety mechanisms.
- Hot tests of propulsion system for crew & service modules.
- Integrated Air Drop Test (IADT-1, 2025): successful demonstration of parachute deceleration system.

Collaborations

- Supported by IAF (astronaut selection & training), DRDO (life support & recovery tech), Navy & Coast Guard (sea recovery ops). **Hence statement 3 is correct.**
- Russia’s Roscosmos trained 4 IAF test pilots as astronaut candidates.
- European Space Agency (ESA) providing technical support in spaceflight safety.

Significance

- India will become the 4th nation (after Russia, USA, China) to send humans into space indigenously. **Hence statement 4 is correct.**
- Strengthens national security, technology base, and global standing.

- Provides spin-offs in aerospace, materials, robotics, medicine, and AI.
- Lays foundation for future missions – space station, Moon, Mars exploration.

PYQ REFERENCE:

Q. Consider the following space missions:

- Axiom-4
- SpaDeX
- Gaganyaan

How many of the space missions given above encourage and support microgravity research?

- Only one
- Only two
- All three**
- None

Source: <https://www.thehindu.com/sci-tech/science/isro-completes-first-integrated-air-drop-test-for-gaganyaan/article69971528.ece>

14. Integrated Air Defence Weapon System (IADWS)

14. Consider the following:

- Quick Reaction Surface-to-Air Missiles (QRSAM)
- Advanced Very Short Range Air Defence System (VSHORADS)
- High-power laser-based Directed Energy Weapon (DEW)

How many of the above are part of the Integrated Air Defence Weapon System (IADWS) which was developed indigenously by DRDO?

- Only one
- Only two
- All three
- None

Answer: (c) All three

Explanation:

In NEWS: DRDO successfully conducts maiden tests of indigenous integrated air defence system

Integrated Air Defence Weapon System (IADWS)

- The Defence Research and Development Organisation (DRDO) successfully conducted the maiden flight test of the Integrated Air Defence Weapon System (IADWS).
- The test took place off the coast of Odisha.
- IADWS is a multi-layered air defence system developed indigenously by DRDO.

- The system comprises:
 - Quick Reaction Surface-to-Air Missiles (QRSAM)
 - Advanced Very Short Range Air Defence System (VSHORADS)
 - High-power laser-based Directed Energy Weapon (DEW)
- **Hence all three are correct.**
- All components are controlled by a Centralised Command and Control Centre developed by DRDO.
- During the test, three different targets were engaged and destroyed simultaneously:
 - Two high-speed fixed-wing UAV targets
 - One multi-copter drone
- QRSAM, VSHORADS, and DEW neutralised targets at different ranges and altitudes.
- The system also included a drone detection and destruction system, communication networks, command & control, and radars.
- All weapon systems and sensors performed flawlessly, confirmed by Integrated Test Range (ITR) instruments at Chandipur.
- The test was witnessed by senior DRDO scientists and armed forces representatives.
- Defence Minister Rajnath Singh congratulated DRDO, armed forces, and industry for the successful development.
- IADWS demonstrates India's multi-layered air defence capability and strengthens protection of vital facilities against enemy aerial threats.

PYQ REFERENCE:

Q. With reference to India's defence, consider the following pairs:

Aircraft Type	Description
I. Dornier-228	- Maritime patrol aircraft
II. IL-76	- Supersonic combat aircraft
III. C-17 Globemaster III	- Military transport aircraft

How many of the pairs are correctly matched?

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

Source:

<https://www.thehindu.com/news/national/drdo-successfully-conducts-maiden-flight-tests-of-integrated-air-defence-weapon-system/article69970850.ece>

15. Bloom Syndrome

15. Consider the following statements:

Statement I: Bloom Syndrome is a rare genetic disorder characterized by short stature, sun-sensitive skin, and increased risk of cancer.

Statement II: It is caused by mutations in the BLM gene, which encodes a DNA helicase enzyme.

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

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: (a) Both Statement I and Statement II are correct and Statement II explains Statement I

Explanation:

In NEWS: All you need to know about: Bloom syndrome

Bloom Syndrome:

- Bloom Syndrome is a rare genetic disorder characterized by short stature, sun-sensitive skin, and increased risk of cancer. **Hence statement 1 is correct.**
- It is caused by mutations in the BLM gene, which encodes a DNA helicase enzyme. **Hence statement 2 is correct and explains statement 1.**
- The syndrome follows an autosomal recessive inheritance pattern (both parents must carry the defective gene).
- Individuals often show chromosomal instability and a high rate of sister chromatid exchanges.
- Common features include growth retardation, narrow face, prominent nose, skin rashes, and café-au-lait spots.
- Patients have immune system deficiencies, leading to frequent infections.
- They are highly prone to various cancers (like leukemia, lymphoma, gastrointestinal, and skin cancers) at an early age.
- Fertility problems are common — males are usually infertile, and females have reduced fertility.
- Diagnosis is done through genetic testing and cytogenetic studies showing chromosomal breaks.
- There is no cure; treatment focuses on cancer surveillance, infection control, and supportive care.
- The syndrome is most commonly reported among Ashkenazi Jewish populations, though it can occur worldwide.

- Life expectancy is reduced, mainly due to cancer-related complications.

PYQ REFERENCE:

Q. In the context of hereditary diseases, consider the following statements:

1. Passing on mitochondrial diseases from parent to child can be prevented by mitochondrial replacement therapy either before or after in vitro fertilization of egg.
2. A child inherits mitochondrial diseases entirely from mother and not from father.

Which of the statements given above is/are correct?

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

Source: <https://www.thehindu.com/sci-tech/health/all-you-need-to-know-about-bloom-syndrome/article69955319.ece>

16. INS Udaygiri and INS Himgiri

16. Consider the following statements:

1. INS Udaygiri and INS Himgiri are advanced Project-17A Nilgiri-class stealth guided-missile frigates of the Indian Navy.
2. INS Udaygiri and INS Himgiri are capable of anti-air, anti-surface, and anti-submarine warfare.

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: The Indian Navy on Tuesday (August 26) simultaneously commissioned two Nilgiri-class stealth guided-missile frigates, the INS Udaygiri and INS Himgiri, at Visakhapatnam.

INS Udaygiri and INS Himgiri:

- INS Udaygiri and INS Himgiri are advanced Project-17A Nilgiri-class stealth guided-missile frigates of the Indian Navy. **Hence statement 1 is correct.**
- They were commissioned on 26 August 2025, marking the first-ever simultaneous commissioning of two

frontline warships built at different shipyards – MDL (Mumbai) and GRSE (Kolkata).

- INS Udaygiri is the 100th warship designed by the Navy's Warship Design Bureau, a landmark in indigenous warship design.
- They have a displacement of around 6,700 tonnes, about 5% larger than Shivalik-class frigates, and are equipped with stealth features to reduce radar and infrared signatures.
- Armed with BrahMos supersonic missiles, surface-to-air missiles, torpedoes, and electronic warfare systems, they are capable of anti-air, anti-surface, and anti-submarine warfare. **Hence statement 2 is correct.**
- The ships have over 75% indigenous content, involving 200+ MSMEs, creating 4,000 direct and 10,000 indirect jobs, reflecting Aatmanirbhar Bharat.
- Defence Minister Rajnath Singh called them "floating F-35s," symbolizing their cutting-edge technology and global-class capability.
- Strategically, they enhance the Navy's Eastern Fleet and strengthen India's presence in the Indian Ocean Region (IOR).

Stealth frigate:

- A stealth frigate is a modern warship engineered with stealth technology to minimise detectability by enemy sensors, including radar, infrared, and acoustic systems.
- It features specially designed hulls, low-observable materials, and controlled emissions to reduce radar cross-section, heat signature, and noise, making it significantly harder to detect, track, and target in combat.

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://indianexpress.com/article/explained/warships-navy-features-legacy-ins-udaygiri-himgiri-commission-10211850/>

ENVIRONMENT AND AGRICULTURE

1. Matri Van

1. The "Matri Van initiative" aims at:

- (a) Promotion of commercial farming in arid and semi-arid areas
- (b) Development of gardens using genetically modified flora
- (c) Ecological preservation and urban sustainability
- (d) Harvesting wind energy on coastal areas and on sea surfaces

Answer: (c) Ecological preservation and urban sustainability

Explanation:

In NEWS: Union ministers launches for 750 urban forest 'Matri Van' in Gurugram

● The Matri Van initiative was launched in Gurugram as a step towards ecological preservation and urban sustainability. This urban forest project, part of the Government of India's 'Ek Ped Maa Ke Naam' programme. **Hence option (c) is correct.**

The Matri Van initiative:

- Matri Van is designed as a theme-based urban forest inspired by the nurturing qualities of mother nature. It aims to restore the **Aravalli ecosystem** by planting native tree species.
- The forest will act as the "**heart and lung**" of Delhi NCR, improving air quality and providing a serene environment for health and leisure. It supports India's broader goals of reducing carbon emissions and promoting renewable energy.
- The project focuses on removing invasive species like **Kabuli Kikar (Prosopis juliflora)** and replacing them with native trees such as Bargad, Peepal, Neem, Dhak, and Aravalli-specific species like Dhauk and Khairi. The forest will feature themed groves including Bodhi Vatika, Bamboo Setum, Medicinal Plants Vatika, Butterfly Garden, and others. These groves will preserve local flora and support diverse fauna.
- Matri Van involves extensive community engagement through CSR initiatives, NGOs, and RWAs.
- The initiative aligns with the Prime Minister's Mission LiFE (Lifestyle for Environment), which advocates saving food, water, and energy, managing waste, banning single-use plastics, and promoting healthy lifestyles.
- It complements efforts to increase India's renewable energy share, currently over 50%, and reduce carbon footprints in urban areas.

PYQ REFERENCE:

Q. The "Miyawaki method" is well known for the:

- (a) Promotion of commercial farming in arid and semi-arid areas
- (b) Development of gardens using genetically modified flora
- (c) Creation of mini forests in urban areas**
- (d) Harvesting wind energy on coastal areas and on sea surfaces

Source:

<https://www.hindustantimes.com/cities/gurugram-news/union-ministers-launches-for-750a-urban-forest-matri-van-in-gurugram-101754160440797.html>

2. Bio-fortified potatoes

2. Consider the following statements:

1. India is the first country to release Vitamin A-fortified sweet potatoes, developed by the International Potato Center.
2. Iron-fortified potatoes developed by the International Potato Center are already being grown in states like Karnataka, Assam, West Bengal, and Odisha.

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: Bio-fortified potatoes to hit Indian market soon

Bio-fortified Potatoes:

- **Iron-fortified potatoes** are being developed by the International Potato Center (CIP) and will soon be available in Indian markets.
- These bio-fortified potatoes are being designed to help combat iron deficiency, which is a common problem in many parts of the world.
- The CIP has already shared the germplasm (genetic material) of these iron-fortified potatoes with the Indian Council of Agricultural Research (ICAR) and Central Potato Institute (CPI) in Shimla, India.
- The variety **has been released in Peru**, and it is now under evaluation for Indian growing conditions. **Hence statement 1 is incorrect.**

Bio-fortified Sweet Potatoes:

- **Vitamin A-fortified sweet potatoes**, developed by the CIP, are already being grown in states like Karnataka, Assam, West Bengal, and Odisha. **Hence statement 2 is incorrect.**
- These sweet potatoes, which are bright orange inside, are aimed at addressing Vitamin A deficiency.
- The CIP plans to expand the availability of bio-fortified sweet potato seeds to more farmers to improve nutrition across regions.

Food fortification:

- Food fortification is the process of adding essential nutrients to food items to address nutrient deficiencies in populations.
- It is one of the most effective public health strategies to combat micronutrient malnutrition or hidden hunger, which affects millions globally.
- The nutrients typically added through fortification include vitamins, minerals, and sometimes other nutrients, such as fiber or protein.

Micronutrient Fortification:

- This is the most common form of fortification, where vitamins and minerals are added to foods. Examples include:
 - Iodine added to salt (iodized salt).
 - Vitamin D added to milk.
 - Iron added to cereals or flour to address iron deficiency anemia.
 - Folic acid added to grains to prevent birth defects.
 - Vitamin A added to cooking oil or sugar to reduce blindness and improve immunity.

Macro-nutrient Fortification:

While micronutrient fortification is the most common, some foods are fortified with macronutrients like protein or fiber to address larger dietary gaps.

Bio-fortification:

This involves the genetic improvement of crops to increase their nutrient content. For example, developing iron-fortified potatoes or vitamin A-rich sweet potatoes, as mentioned earlier, is a form of bio-fortification.

Common Fortified Foods:

- **Salt:** Fortified with iodine to prevent iodine deficiency.
- **Flour & Cereal:** Fortified with iron, folic acid, and vitamins to combat deficiencies in iron and B-vitamins.
- **Milk:** Fortified with vitamin D to aid calcium absorption and combat rickets.
- **Sugar:** Fortified with vitamin A in some countries to fight blindness.
- **Oil:** Fortified with vitamin A to help reduce vitamin A deficiency.

Source:

<https://www.thehindu.com/news/national/bio-fortified-potatoes-to-hit-indian-market-soon/article69890666.ece#:~:text=CIP's%20regional%20centre%20in%20Agra,in%20the%20region%3A%20Simon%20Heck&text=Bio%2Dfortified%20potatoes%2C%20with%20added,an%20interview%20to%20The%20Hindu.>

3. Alpine Musk Deer

3. Consider the following statements with respect to the Alpine Musk Deer:

1. It is found primarily in the Himalayan region of Asia, particularly in parts of India, Nepal, Bhutan, China, and Myanmar.
2. They are generally solitary animals, especially the males.
3. The Alpine Musk Deer prefers relatively colder climates with steeper and more rugged terrain than the Himalayan Musk Deer
4. It is listed as Endangered on the International Union for Conservation of Nature (IUCN) Red List

Which of the statements given above are correct?

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

Answer: (c) 1, 2 and 4

Explanation:

In NEWS: A Central Zoo Authority report says confusion in animal identification might have led to selection of wrong deer species for conservation breeding.

Alpine Musk Deer:

- The Alpine Musk Deer (*Moschus chrysogaster*) is a species of musk deer that is found primarily in the Himalayan region of Asia, particularly in parts of India, Nepal, Bhutan, China, and Myanmar. **Hence statement 1 is correct.**
- It is one of the several species of musk deer that are known for the musk gland, which is highly valued in the perfume industry.
- The species is adapted to cold, mountainous climates with sparse vegetation, and it prefers dense undergrowth where it can find shelter and food.
- They are herbivores, primarily feeding on grasses, leaves, berries, and mosses. Their diet is rich in vegetation that grows in their alpine habitat.

- Alpine Musk Deer are generally **solitary animals**, especially the males. They have a very elusive and secretive nature and are difficult to spot in their natural habitat. **Hence statement 2 is correct.**
- The Alpine Musk Deer is listed as **Endangered** on the International Union for Conservation of Nature (IUCN) Red List due to habitat loss, poaching, and the illegal trade in musk. **Hence statement 4 is correct.**
- The Alpine musk deer population has declined sharply. In the 1980s, about 1,000 individuals were estimated in the wild. Current numbers are unknown due to lack of recent surveys.
- The absence of captive breeding success worsens the species' survival outlook.
- The CZA, established in 1992 under the Wild Life (Protection) Act, oversees captive breeding of endangered species in India. It identifies species for breeding and assigns responsibility to zoos.



Species Misidentification:

- The Alpine musk deer and Himalayan musk deer share overlapping habitats. This sympatric distribution has caused zoos to mistakenly breed Himalayan musk deer instead of Alpine musk deer.
- The CZA report notes that the Musk Deer Breeding Centre near Chopta in Uttarakhand and the Padmaja Naidu Himalayan Zoological Park in Darjeeling likely housed Alpine musk deer but did not initiate a specific breeding programme for them. Consequently, captive populations of Alpine musk deer in India remain unclear.

Difference between Alpine Musk Deer and Himalayan Musk Deer:

Alpine Musk Deer (*Moschus chrysogaster*):

- Found in elevated regions of the Himalayas at 2,500-4,500 meters in countries like India, Nepal, Bhutan, and parts of China.
- Prefers alpine meadows and forested slopes with dense undergrowth.
- It typically lives in regions with **moderately cold climates**, mainly at the lower altitudes of the Himalayas.

Himalayan Musk Deer (*Moschus leucurus*):

- Found in higher altitudes in the Himalayas and Tibetan Plateau, mostly in Nepal, India, Bhutan, and China.

- This species typically inhabits forests and alpine meadows at 3,000–4,500 meters above sea level.
- **Prefers colder climates with steeper and more rugged terrain** and is found in mountainous regions with dense forests and snow-capped areas. **Hence statement 3 is correct.**

PYQ REFERENCE:

Q. Which of the following are the most likely places to find the musk deer in its natural habitat?

1. Askot Wildlife Sanctuary
2. Gangotri National Park
3. Kishanpur Wildlife Sanctuary
4. Manas National Park

Select the correct answer using the code given below:

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

Source: <https://www.downtoearth.org.in/wildlife-biodiversity/mistaken-identity>

4. Ashtamudi Wetland

4. Consider the following statements with respect to Ashtamudi lake:

1. It is the second largest wetland in Kerala, after the Vembanad Lake.
2. It is presently placed in the tentative list of RAMSAR sites.
3. It is an artificial lake formed by the confluence of several rivers and the sea

Which of the statements given above are correct?

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

Answer: (a) 1 only

Explanation:

In NEWS: Kerala HC directs State government and SWAK to constitute Ashtamudi Wetland Management Unit

Ashtamudi wetland:

- Ashtamudi Lake, the **second largest wetland in Kerala**, after Vembanad Lake is facing severe environmental degradation. **Hence statement 1 is correct.**

- The wetland is a network of interconnected lakes, rivers, and estuaries.
- It has a unique octagonal shape (hence the name "Ashtamudi", which means "eight coned" in Malayalam).
- It is a **natural lake** located in the Kollam district of Kerala, India. **Hence statement 3 is incorrect.**
- Ashtamudi Lake is a lagoon, formed by the confluence of several rivers and the sea.
- It has been designated a Ramsar site (a wetland of international importance) since 2002, which adds to its significance for biodiversity conservation and ecosystem services. **Hence statement 2 is incorrect.**
- The wetland sustains the livelihoods of around 300,000 people living in its vicinity, particularly through fishing, aquaculture, and tourism.
- The wetlands serve as essential breeding grounds for many species of fish and marine life.
- The wetland has been heavily impacted by pollution, encroachments, and siltation, primarily caused by human activities, including waste dumping and illegal constructions.

Court's Directive:

The Kerala High Court, in response to a Public Interest Litigation (PIL), issued the following orders:

- **Constitution of Ashtamudi Wetland Management Unit:** The State government and State Wetland Authority Kerala (SWAK) must set up an Ashtamudi Wetland Management Unit within two months of the notification.
- **Management Plan:** An integrated management plan for the wetland must be finalized within six months.
- **Monitoring and Sanitation:** The court emphasized the necessity of continuous monitoring of the lake's conservation efforts. The standard operating procedure (SOP) for the management unit should include specific details on venue, frequency of meetings, and coordination mechanisms.
- **Public Engagement:** The Management Unit is required to establish a website or a dedicated web page where the public can provide feedback and access information. SWAK must create a digital feedback mechanism (via social media and other online platforms) to allow the public to share audio-visual materials, helping in the monitoring process.

PYQ REFERENCE:

Q. Which one of the following is an artificial lake?

- (a) Kodaikanal (Tamil Nadu)
- (b) Kolleru (Andhra Pradesh)
- (c) Nainital (Uttarakhand)
- (d) Renuka (Himachal Pradesh)

Source:

<https://www.thehindu.com/news/national/kerala/kerala-hc-directs-state-government-and-swak-to-constitute-ashtamudi-wetland-management-unit/article69873992.ece>

5. "World Seeds" experiment

5. Which among the following is the best description of the "World Seeds" experiment, recently seen in the news?

- (a) It is a space-based experiment that investigates how seeds from diverse global regions respond to space conditions like microgravity and radiation.
- (b) It is a facility designed to store seeds as a safeguard against the loss of crop diversity located at Svalbard.
- (c) It is an experiment by the Indian Council of Agricultural Research (ICAR) to monitor germination of seeds in anaerobic conditions.
- (d) It aims at preserving traditional seed varieties and promoting climate-resilient agriculture through a seed bank at Ladakh.

Answer: (a) It is a space-based experiment that investigates how seeds from diverse global regions respond to space conditions like microgravity and radiation.

Explanation:

In NEWS: Seeds of seabuckthorn, Himalayan buckwheat part of experiment on ISS

"World Seeds" experiment:

- World Seeds is a space-based experiment led by Jaguar Space, a U.S. bioastronautics firm.
- It investigates how seeds from diverse global regions respond to space conditions like microgravity and radiation. **Hence option (a) is correct.**
- The seeds were flown to the International Space Station (ISS) aboard NASA's Crew-11 mission on August 1, 2025.
- The experiment includes seeds from 11 countries across 5 continents, including India, Pakistan, Egypt, Nigeria, Brazil, and the Maldives.
- From India, Protoplanet, a Bengaluru-based startup, contributed seabuckthorn and Himalayan buckwheat seeds from Ladakh.

Objectives of the experiment:

- The study focuses on gene activation and metabolic changes that occur during the early germination process in space.
- It aims to evaluate which plants could be viable for space farming during long-duration missions.

- It also explores climate resilience and food security implications for Earth.
- The project symbolizes inclusive space exploration, ensuring biodiversity and traditional agricultural knowledge are part of humanity's space journey.

Seabuckthorn:

- Seabuckthorn is a hardy, deciduous shrub native to cold desert and high-altitude regions such as Ladakh and the Himalayas.
- It is known for its bright orange berries, which are rich in Vitamin C, antioxidants, and omega fatty acids.

Himalayan buckwheat:

- It is a nutrient-rich pseudo-cereal native to high-altitude regions like Ladakh.
- It is gluten-free and known for being rich in protein, fiber, flavonoids (especially rutin), and essential minerals.
- The plant is adapted to cold desert climates, making it suitable for cultivation in extreme and marginal environments.

Source: <https://www.thehindu.com/sci-tech/science/seeds-of-seabuckthorn-himalayan-buckwheat-part-of-experiment-on-iss/article69889456.ece>

6. Asian giant tortoise

6. 'Zeliang Community Reserve', known for the reintroduction of the largest tortoise species in mainland Asia is located in

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

Answer: (d) Nagaland

Explanation:

In NEWS: Largest Asian tortoise species reintroduced into Nagaland community reserve

Reintroduction of Asian Giant Tortoise:

- The Asian Giant Tortoise (*Manouria emys*), the largest tortoise in mainland Asia, has been reintroduced in Zeliang Community Reserve, Peren district, Nagaland.

Hence option (d) is correct.

- 10 tortoises, bred in Nagaland Zoological Park, were released into the wild on August 2, 2025, through a community-led event.
- 'Tortoise guardians' from the local community have been trained and engaged for monitoring and protection of the released tortoises.

Asian Giant Tortoise:

- The Asian Giant Tortoise is the largest tortoise in mainland Asia.
- It is classified as **Critically Endangered** by the IUCN Red List.
- The species is native to the Eastern Himalayas, Northeast India, Southeast Asia, including parts of Myanmar, Thailand, Malaysia, and Indonesia.
- It is a **terrestrial tortoise that prefers dense tropical rainforests**.
- It plays a crucial ecological role by dispersing seeds, aiding forest regeneration, and cleaning forest floors.
- Threats include habitat loss, hunting, and illegal pet trade.
- The species is listed under **Schedule IV** of the Indian Wildlife (Protection) Act, 1972.
- In India, it was once widely found in Nagaland, but was almost wiped out from the region over a decade ago.
- Conservation efforts have been revived through the India Turtle Conservation Programme (ITCP) and Nagaland Forest Department.
- Captive breeding and "head-starting" (raising young in protected conditions) have been used to boost wild populations.
- The tortoise is also called the "**small elephant of the forest**" due to its size and strength.
- Local communities are involved in conservation as 'tortoise guardians' to protect and monitor the released animals.

PYQ REFERENCE:

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.thehindu.com/news/national/nagaland/largest-asian-tortoise-species-reintroduced-into-nagaland-community-reserve/article69893678.ece>

7. Blue Carbon

7. Consider the following statements:

Statement-I: Blue carbon ecosystems include mangroves, seagrass meadows, and salt marshes.

Statement-II: Blue carbon ecosystems are coastal and marine habitats that artificially capture and store carbon dioxide from the atmosphere.

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

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

Answer: (c) Statement-I is correct but Statement-II is incorrect

Explanation:

In NEWS: PARLIAMENT QUESTION: BLUE CARBON PROJECT

Blue carbon ecosystems:

- Blue carbon refers to carbon captured by oceans and coastal ecosystems.
- Blue carbon ecosystems such as mangroves, seagrass meadows, and salt marshes are coastal and marine habitats that **naturally capture** and store carbon dioxide from the atmosphere. **Hence statement-I is correct but Statement-II is incorrect**
- These ecosystems capture and store atmospheric CO₂, helping fight climate change.

There is no dedicated national framework for Blue Carbon projects. However Initiatives indirectly Supporting Blue Carbon are:

Namami Gange Programme (NMCG)

- Focuses on river rejuvenation, including afforestation and biodiversity conservation.
- Scientific afforestation along River Ganga has indirectly supported blue carbon capture.

Mangrove Conservation – Tamil Nadu

- ₹220.43 lakhs sanctioned (2017–2023) for mangrove restoration (e.g. Pichavaram).
- Funded under National Coastal Mission – Mangroves & Coral Reefs component.

MISHTI (Mangrove Initiative)

- Launched on 5 June 2023 by the Ministry of Environment.
- Focus: Promote mangroves as carbon sinks and coastal shields.
- Implemented through CAMPA, MGNREGS, and other schemes.

Policy & Legal Framework

- IN India's NDCs (Paris Agreement)
- Target: Create additional carbon sink of 2.5–3 billion tonnes CO₂ by 2030.
- Blue carbon is not explicitly mentioned, but supports overall climate goals.

Carbon Credit Trading Scheme (CCTS)

- Notified: 28 June 2023 under Energy Conservation (Amendment) Act, 2022.
- It Includes:
 - Compliance mechanism
 - Offset mechanism
 - No technical assistance under CCTS yet provided to Tamil Nadu or other states.

PYQ REFERENCE:

Q. What is blue carbon?

- (a) Carbon captured by oceans and coastal ecosystems.
- (b) Carbon sequestered in forest biomass and agricultural soils.
- (c) Carbon contained in petroleum and natural gas.
- (d) Carbon present in atmosphere.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2152126>

8. Red Panda

8. Regarding *Ailurus fulgens* (Red Panda), consider the following statements:

1. It is a herbivore
2. It is an arboreal mammal
3. It is mostly active at dawn and dusk
4. It is native to the Eastern Himalayas and southwestern China.
5. It is protected under Schedule II of the Wildlife (Protection) Act, 1972

Which of the statements given above are correct?

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

Answer: (b) 2, 3 and 4 only

Explanation:

In NEWS: Two Red Panda cubs were born in the Himalayan Zoological Park (HZP), Bulbuley near Gangtok, after seven years

Red Panda:

- The Red Panda (*Ailurus fulgens*) is a small arboreal mammal native to the Eastern Himalayas and southwestern China. **Hence statements 2 and 4 are correct.**
- Red pandas are found in Sikkim, Arunachal Pradesh, West Bengal (Darjeeling), and parts of Meghalaya.

- Their primary habitat includes temperate forests with dense bamboo understory.
- Red pandas serve as an indicator species, reflecting the health of their ecosystem.
- Red pandas are mainly herbivorous, feeding largely on bamboo, but they also eat fruits, insects, eggs, and small mammals. **Hence statement 1 is incorrect.**
- They have a distinctive appearance with reddish-brown fur, a long bushy tail with rings, and a white face mask.
- They are solitary and nocturnal/crepuscular, mostly active at dawn and dusk. **Hence statement 3 is correct.**
- The average lifespan of a red panda in the wild is about 8 to 10 years, and up to 15 years in captivity.



Conservation Status:

- It is listed as Endangered on the IUCN Red List due to habitat loss, poaching, and climate change.
- In India, it is protected under Schedule I of the Wildlife (Protection) Act, 1972. **Hence statement 5 is incorrect.**
- Conservation breeding programs are underway in India, including at the Himalayan Zoological Park in Sikkim and the Padmaja Naidu Himalayan Zoological Park in Darjeeling.
- The major threats to red pandas are deforestation, habitat fragmentation, illegal pet trade, and climate-related changes in their bamboo food supply.

PYQ REFERENCE:

Q. Regarding Peacock tarantula (Gooty tarantula), consider the following statements:

- It is an omnivorous crustacean.
- Its natural habitat in India is only limited to some forest areas.
- In its natural habitat, it is an arboreal species.

Which of the statements given above is/are correct?

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

Source:

<https://timesofindia.indiatimes.com/home/environment/flora-fauna/2-red-panda-cubs-born-at-himalayan-zoological-park-bulbuley-after-seven-years/articleshow/123062199.cms>

9. Minimum Support Price (MSP)

9. Which of the following statements is/are correct regarding Minimum Support Price (MSP) in India?

- The Commission for Agricultural Costs and Prices (CACP) approves the MSP.
- The government announces MSPs for various crops after the sowing season.
- Major millets like bajra, jowar and ragi are covered under the Minimum Support Prices framework in India.

Select the correct answer using the codes given below:

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

Answer: (c) 3 only

Explanation:

In NEWS: DATA ON MSP

Minimum Support Price (MSP):

- In India, the Minimum Support Price (MSP) is a form of market intervention by the government to protect farmers from price drops for their produce.
- The government announces MSPs for various crops **before the sowing season** based on recommendations from the **Commission for Agricultural Costs and Prices (CACP)**.
- The government procures crops at the MSP if market prices fall below it.
- The MSP is announced twice a year, before the Kharif (monsoon) and Rabi (winter) sowing seasons.

How is MSP determined?

- The CACP recommends the MSP based on various factors.
- These factors include:
 - Cost of production (including A2+FL costs and C2 costs).
 - Market prices (domestic and international).
 - Demand and supply dynamics.
 - Other relevant factors like crop patterns and industry trends.

- The **Cabinet Committee on Economic Affairs (CCEA)**, chaired by the Prime Minister, approves the MSP based on CACP recommendations.

Crops under MSP:

- **Cereals (7):** Paddy, wheat, maize, bajra, jowar, ragi, and barley.
- **Pulses (5):** Chana, arhar/tur, urad, moong, and masur.
- **Oilseeds (7):** Rapeseed-mustard, groundnut, soyabean, sunflower, sesamum, safflower, and nigerseed.
- **Commercial Crops (4):** Cotton, sugarcane, copra, and raw jute.

PYQ REFERENCE:

Q. Consider the following:

1. Areca nut
2. Barley
3. Coffee
4. Finger millet
5. Groundnut
6. Sesamum
7. Turmeric

The Cabinet Committee on Economic Affairs has announced the Minimum Support Price for which of the above?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2152556>

10. India-Brazil Biofuels Alliance

10. Consider the following:

1. Ethanol Blending
2. Sustainable Aviation Fuel
3. Flex-Fuel & Second-Generation Biofuels
4. Technology Transfer

How many of the above are the key components under the India-Brazil Biofuels Alliance?

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

Answer: (d) All four

Explanation:

In NEWS: How the India-Brazil Biofuel Alliance Could Reshape Global Energy

Biofuels:

- Biofuels are liquid or gaseous fuels derived from biomass, which can be plants, agricultural waste, animal waste, and even algae.
- Biofuels are renewable fuels made from plant material (like sugarcane, maize) or waste
- They help reduce greenhouse gas emissions, boost rural incomes, and reduce dependence on fossil fuels.
- Biofuels are crucial for hard-to-abate sectors like aviation, freight, and agriculture.

India-Brazil Biofuel Alliance:

- Anchored in shared climate goals and South-South solidarity.
- Accelerated **under the Global Biofuels Alliance (GBA) launched during India's G20 presidency in 2023.**

Focus areas:

- **Ethanol Blending:**
 - India targets 20% ethanol-blended petrol by 2025.
 - Brazil uses ethanol for ~30% of car fuel; grows sugarcane in the off-season to balance sugar and ethanol production.
- **Sustainable Aviation Fuel (SAF):**
 - A key focus due to the difficulty in decarbonising aviation.
 - Brazil's ethanol ecosystem + India's renewable energy capacity = potential SAF leadership.
- **Flex-Fuel & Second-Generation Biofuels:**
 - Tech exchange for advanced biofuels using agricultural waste (like rice straw, maize husk, used cooking oil).
- **Joint Investment & Technology Transfer:**
 - **Brazil:** Advanced in sugarcane ethanol (~30% of car fuel mix), new "Fuels of the Future" law targeting 20% biodiesel by 2030.
 - **India:** Expanding ethanol blending, using rice straw, maize, and used cooking oil; pushing compressed biogas and SAF.
 - **Joint Ventures:** Indian investment in Brazil's bioenergy; Petrobras investing \$600M in biodiesel/biomethane; Indian companies like ONGC Videsh and Bharat Petroleum involved.

PYQ REFERENCE:

Q. Consider the following statements:

Statement I: Of the two major ethanol producers in the world, i.e., Brazil and the United States of America, the former produces more ethanol than the latter.

Statement II: Unlike in the United States of America where corn is the principal feedstock for ethanol

production, sugarcane is the principal feedstock for ethanol production in Brazil

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://www.dailypioneer.com/2025/columnists/how-the-india-brazil-biofuel-alliance-could-reshape-global-energy.html>

11. Rhisotope Project

11. The 'Rhisotope Project' is sometimes seen in the news in the context of

- (a) Captive breeding of Wild Fauna
- (b) Maintenance of Tiger Reserves
- (c) Anti-poaching of Rhino horns
- (d) Small nuclear reactors

Answer: (c) Anti-poaching of Rhino horns

Explanation:

In NEWS: How a new project plans to curb rhino poaching through radioactive isotope injections

Rhisotope Project:

- A South African initiative led by the University of the Witwatersrand, supported by the **International Atomic Energy Agency (IAEA)**.
- The project aims to inject small amounts of radioactive isotopes into rhino horns to deter poaching and improve horn detection at borders. **Hence option (c) is correct.**
- **Radioisotope Injection:** Low doses are injected non-invasively into rhino horns.
- **Detection:** Horns can then be detected using **radiation portal monitors (RPMs)** at ports, airports, and borders.
- **Invisibility to poachers:** The process is discreet, making it hard for poachers to know which horns are tagged.
- It was tested on 20 rhinos and showed no adverse health effects.

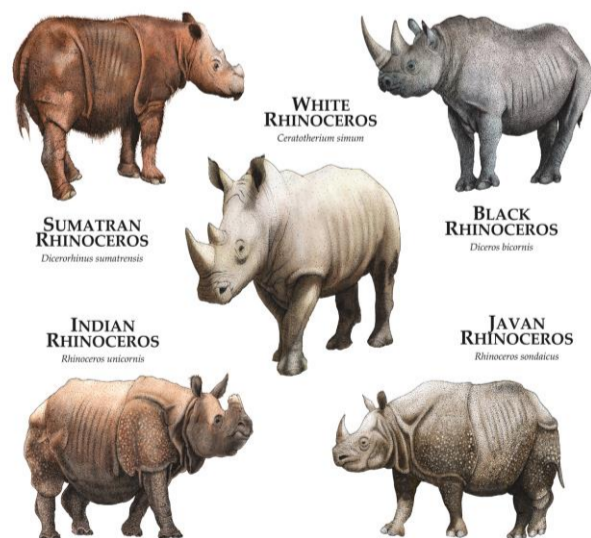
South Africa

Home to most of the world's rhinos.
10,000+ rhinos killed in the last decade.
103 poached in the first quarter of 2025 alone.

Rhinoceros:

- There are five extant (living) species of rhinoceros: **the white rhino and black rhino in Africa, and the Indian rhino, Javan rhino, and Sumatran rhino in Asia.**
- Rhinos are known for their thick, tough skin, which can appear armor-like.
- They also possess one or two horns on their snout, **made of keratin** (the same material as human hair and fingernails).
- White and black rhinos live in grasslands and savannas of Africa.
- The Indian rhino is found in the **Indo-Gangetic Plain** of India and Nepal, while the Javan and Sumatran rhinos inhabit parts of **Southeast Asia**.
- Rhinos are **herbivores**, meaning they primarily eat plants. African rhinos graze on grasses, while Asian rhinos consume leaves, twigs, and fruits.
- Rhinos are generally **solitary animals**, except for mothers with calves or during the breeding season.
- Rhinos have **poor eyesight** but possess excellent **hearing** and a **strong sense of smell**. They wallow in mud to cool down and protect their skin from insects.
- The biggest threats to rhinoceroses are poaching and habitat loss.
- Many rhino species are currently classified as endangered or critically endangered. For example, the **black rhino is considered critically endangered**, the **Indian rhino is listed as Vulnerable**, with its population fragmented and restricted to certain areas.

ENDANGERED RHINOCEROS
OF THE WORLD



PYQ REFERENCE:

Q. The term 'M-STRIPES' is sometimes seen in the news in the context of

- (a) Captive breeding of Wild Fauna
- (b) Maintenance of Tiger Reserves**
- (c) Indigenous Satellite Navigation System
- (d) Security of National Highways

Source:

<https://indianexpress.com/article/explained/explain-ed-sci-tech/rhino-poaching-radioactive-isotope-injections-10167467/>

12. Biochar

12. Biochar, recently seen in the news, is known to have which of the following effects on soil?

1. Enhances soil structure and improves air circulation.
2. Reduces greenhouse gases emissions from the soil.
3. Decreases nutrient leaching
4. Lowers soil acidity.
5. Increases water retention capacity of the soil.

Select the correct answer using the code given below:

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

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

Explanation:

In NEWS: With the Indian carbon market set to be launched in 2026, CO₂ removal technologies such as biochar are expected to play a crucial role.

Biochar:

- Biochar is a lightweight, carbon-rich material produced from the pyrolysis of biomass in an oxygen-limited environment.
- Composed of carbon and ashes, it is sterile post-production but can host biological life after exposure to biota.
- Defined by the International Biochar Initiative as the "solid material obtained from the thermochemical conversion of biomass in an oxygen-limited environment."

Primary Applications:

- **Soil Aeration:** Enhances soil structure, improving air circulation.
- **Greenhouse Gas Reduction:** Reduces soil emissions of greenhouse gases.

- **Nutrient Retention:** Decreases nutrient leaching, preserving soil nutrients.
- **Soil Acidity:** Lowers soil acidity, improving conditions for plant growth.
- **Water Retention:** Increases water content in coarse soils, aiding drought resistance.
- **Agricultural Productivity:** May boost soil fertility and crop yields.

Hence all the statements are correct.

Other Applications:

- **Slash-and-Char Farming:** Used to improve soil in traditional farming practices.
- **Animal Fodder Additive:** Incorporated into feed to enhance animal health.
- **Construction Materials:** Substituted in concrete or tar for carbon sequestration.
- **Carbon Sequestration:** Biochar's stability (lasting thousands of years) makes it effective for long-term carbon storage.
- **Biochar Carbon Removal:** Applied to soils or construction materials to sequester carbon, reducing atmospheric CO₂.

Potential Risks:

- Excessive application or unsuitable feedstock can:
- Harm soil biota.
- Reduce available water content.
- Alter soil pH unfavorably.
- Increase soil salinity.

PYQ REFERENCE:

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 a 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-is-the-potential-of-biochar-explained/article69902716.ece>

13. Microplastics

13. Consider the following:

1. Microbeads in personal care products
2. Fishing nets
3. Microfibers from synthetic clothing
4. Plastic bags and bottles
5. Microwave containers

How many of the above are categorized as primary microplastics?

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

Answer: (a) Only two

Explanation:

In NEWS: Fishing gear a major source of 'microplastic' contamination along Indian coasts

Microplastics:

- Microplastics are synthetic solid particles or polymeric matrices ranging in size from 1 micrometer to 5 millimeters, which are insoluble in water.
- They originate from both primary manufacturing (intentionally small particles) and secondary sources (breakdown of larger plastics).

Sources and Types:

Primary Microplastics

These are manufactured to be microscopic in size before they enter the environment. Common examples include:

- **Microbeads in personal care products**
- **Microfibers from synthetic clothing**
- Plastic glitter
- Plastic pellets (nurdles) used in industrial manufacturing. **Hence option (a) is correct**

Secondary Microplastics

These result from the breakdown of larger plastic items through weathering, UV radiation, mechanical abrasion, or biological activity. Sources include:

- Plastic bags and bottles
- Fishing nets
- Microwave containers
- Tea bags
- Tire wear particles

Environmental Impact:

- **Aquatic Pollution:** Microplastics are particularly persistent in marine and freshwater environments, contributing significantly to water pollution.
- **Textile Contribution:** About 35% of oceanic microplastic pollution comes from synthetic clothing (polyester, nylon, acrylic), mainly due to fiber shedding during washing.
- **Airborne Microplastics:** These have been found both indoors and outdoors, indicating widespread atmospheric contamination.
- **Soil Ecosystems:** In terrestrial environments, microplastics reduce soil health and biodiversity.
- **Bioaccumulation and Biomagnification:** Microplastics can be ingested by a wide range of organisms, allowing toxic chemicals to enter food chains and accumulate at higher trophic levels.

PYQ REFERENCE:

Q. Consider the following statements :

Statement-I: Many chewing gums found in the market are considered a source of environmental pollution.

Statement-II: Many chewing gums contain plastic as gum base.

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

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/fishing-gear-a-major-source-of-microplastic-contamination-along-indian-coasts/article69901319.ece>

14. Closed Fuel Cycle Technology

14. The term 'Closed Fuel Cycle Technology' is seen in the news is related to

- (a) Long-duration energy storage
- (b) Fuel usage in nuclear power plants
- (c) Hydrogen fuel cells
- (d) Waste treatment technologies

Answer: (b) Fuel usage in nuclear power plants

Explanation:

In NEWS: PARLIAMENT QUESTION:CLOSED FUEL CYCLE TECHNOLOGY

Closed Nuclear Fuel Cycle:

- India follows a closed fuel cycle, meaning:
 - Spent nuclear fuel (SNF) in a nuclear power plant is reprocessed to recover usable fissile and fertile materials.

Hence option (b) is correct.

- Instead of being disposed as waste, materials like plutonium and uranium-233 are recycled.
- This approach maximizes the utility of limited uranium reserves and leverages India's vast thorium resources.

Significance and Strategic Importance:

- **Energy Security:** Reduces reliance on imported fossil fuels. Long-term, cost-effective power source with thorium reserves lasting centuries.
- **Sustainability:** Recycling spent fuel reduces radioactive waste and improves resource efficiency.
- **Technological Advancement:** Development of U-233-based fuel and advanced reactor technologies positions India as a leader in thorium-based nuclear energy.
- **Strategic Autonomy:** Independent fuel cycle ensures India is not dependent on foreign nuclear fuel supply chains.

India's Three-Stage Nuclear Power Programme:

Stage 1: PHWRs (Current Stage)

- Reactors: **Pressurised Heavy Water Reactors** (PHWRs)
- Fuel: Natural Uranium (0.7% U-235 + 99.3% U-238)
- Output: Generates electricity.
- U-238 absorbs neutrons → becomes Plutonium-239, used in Stage 2.
- Status: India has multiple PHWRs in operation (e.g., at Kakrapar, Tarapur, Rawatbhata).

Stage 2: Fast Breeder Reactors (FBRs)

- Reactors: **Fast Breeder Reactors** (no moderator, fast neutrons)
- Fuel: Plutonium-239 + Uranium-238
- Output: Generates more plutonium (breeds fuel) and electricity.
- Produces Uranium-233 if thorium is added, enabling transition to Stage 3.
- Status: Fast Breeder Test Reactor (FBTR) is operational.
- Prototype Fast Breeder Reactor (PFBR) is under construction at Kalpakkam.

Stage 3: Thorium-Based Reactors

- Reactors: **Advanced Heavy Water Reactors** (AHWR)
- Future: Molten Salt Reactors (MSRs) (under R&D)
- Fuel: Thorium-232 (non-fissile) + Uranium-233 (fissile, bred from Th-232)
- Output: Long-term sustainable energy using India's abundant thorium reserves.

- U-233 is recycled, minimizing nuclear waste.
- Status: KAMINI reactor uses U-233 fuel (world's only operational U-233 reactor).
- AHWR design ready, awaiting large-scale deployment.

Small Modular Reactors (SMRs):

- These are advanced nuclear reactors that produce up to 300 MW(e) per unit (much smaller than traditional 1000+ MW plants)
- They can be factory-built, transported, and assembled on-site
- Offer greater flexibility, safety, and cost-effectiveness compared to conventional nuclear plants
- Potential Indian Applications:
 - Power for remote regions, island territories
 - Industrial applications (e.g. steel, fertilizers)
 - Hydrogen production under green energy goals
 - Integration with renewables for reliable baseload

PYQ REFERENCE:

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://www.pib.gov.in/PressReleasePage.aspx?PRID=2153079>

15. Mahanadi water dispute

15. Consider the following statements:

Statement I: The Mahanadi Water Disputes Tribunal (MWDT) was formed on March 12, 2018, under the Inter-State River Water Disputes Act, 1956.

Statement II: Article 262 (1) states that Parliament may by law provide for the adjudication of disputes relating to waters of inter-State rivers and river valleys.

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

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: (a) Both Statement I and Statement II are correct and Statement II explains Statement I

Explanation:

In NEWS: Odisha, Chhattisgarh express willingness to resolve Mahanadi water dispute 'amicably'

Mahanadi water dispute:

The Mahanadi Water Disputes Tribunal (MWDT) was formed on March 12, 2018, following Supreme Court's order (Jan 23, 2018). It was established under the Inter-State River Water Disputes Act, 1956. **Hence statement I is correct.**

Odisha's Concern:

- Significant reduction in water flow into Odisha.
- Chhattisgarh has built 500+ anicuts and 30+ barrages, mostly without consultation.
- Impacts: irrigation, drinking water, and coastal ecosystem degradation in Odisha.

Chhattisgarh's Position:

- 52.9% of the Mahanadi basin lies within Chhattisgarh.
- 89.9% of catchment area up to Hirakud Dam lies in Chhattisgarh — claims greater right to use water.

Constitutional & Legal Mechanisms for River Water Disputes in India:

Constitutional Provisions

- Article 262 – Adjudication of Water Disputes
 - Clause (1): Parliament may by law provide for the adjudication of disputes relating to waters of inter-State rivers and river valleys.
 - Clause (2): Parliament may by law provide that neither the Supreme Court nor any other court shall have jurisdiction over such disputes once a tribunal is constituted. **Hence statement II is correct and Statement II explains Statement I**

Seventh Schedule – Distribution of Powers

- Entry 17 (State List): States can legislate on water – supply, irrigation, canal, drainage, and embankments.
- Entry 56 (Union List): Parliament can regulate and develop inter-State rivers and river valleys in the public interest.

Inter-State River Water Disputes Act, 1956 (ISRWD Act)

- Enacted under Article 262 of the Constitution.
- Empowers the Central Government to Set up a Water Disputes Tribunal when a dispute arises between two or more states.
- The **tribunal's decision is final and binding.**
- The Supreme Court's jurisdiction is excluded over disputes being handled by tribunals.

The Mahanadi River:

- The Mahanadi River is one of the major rivers of east-central India.
- It **originates from the Amarkantak Hills** in the Bastar Plateau of Chhattisgarh.

- The river flows through the states of Chhattisgarh and Odisha before **emptying into the Bay of Bengal.**
- The Mahanadi basin covers an area of around 141,600 square kilometers.
- The river supports agriculture, drinking water, industry, and ecological systems in both Chhattisgarh and Odisha.
- The **Hirakud Dam**, built across the Mahanadi in Odisha, is one of the longest earthen dams in the world.
- The river has several tributaries, including the **Seonath, Hasdeo, Mand, Ib, Ong, and Tel rivers.**

PYQ REFERENCE:

Q. Which one of the following statements is correct as per the Constitution of India?

- (a) Inter-State trade and commerce is a State subject under the State List.
- (b) Inter-State migration is a State subject under the State List.
- (c) Inter-State quarantine is a Union subject under the Union List.**
- (d) Corporation tax is a State subject under the State List.

Source:

<https://www.thehindu.com/news/national/odisha/odisha-chhattisgarh-express-willingness-to-resolve-mahanadi-water-dispute-amicably/article69887063.ece>

16. Great Barrier Reef

16. The Great Barrier Reef is located to the

- (a) North east of Australia in the Coral Sea
- (b) North west of Africa in the Indian ocean
- (c) South east of Australia in the Coral Sea
- (d) South west of Africa in the Indian ocean

Answer: (a) North east of Australia in the Coral Sea

Explanation:

In NEWS: Climate change drives sharpest Great Barrier Reef coral loss in nearly 40 years

- The Great Barrier Reef has suffered its sharpest coral loss in 39 years, with hard coral cover plunging over 70% in some areas.
- The 2024 mass bleaching event, the fifth since 2016, coincided with record heat stress, cyclones and crown-of-thorns starfish outbreaks.
- Scientists warn that frequent and intense bleaching events are leaving the reef with little time to recover, and the window to save it is rapidly closing.

The Great Barrier Reef:

- The Great Barrier Reef is the **world's largest coral reef system**, composed of over 2,900 individual reefs and

900 islands stretching for over 2,300 kilometres (1,400 mi) over an area of approximately 344,400 square kilometres (133,000 sq mi).

- The reef is **located in the Coral Sea**, off the coast of Queensland, North east of Australia, separated from the coast by a channel. **Hence option (a) is correct.**
- The Great Barrier Reef can be seen from outer space and is the **world's biggest single structure made by living organisms.**
- This reef structure is composed of and built by billions of tiny organisms, known as coral polyps.
- It supports a wide diversity of life and was selected as a World Heritage Site in 1981



Ecological Importance:

- Supports marine food webs
- Helps in carbon and nitrogen fixing
- Protects coastlines from erosion and storms

Threats:

- Climate Change: Warming seas cause coral bleaching.
- Pollution: Agricultural runoff and plastic waste.
- Overfishing: Disrupts ecological balance.
- Crown-of-thorns Starfish: A predator of coral.
- Tourism and Development: Coastal expansion and reef damage.

PYQ REFERENCE:

Q. Consider the following statements:

1. Most of the world's coral reefs are in tropical waters.
2. More than one-third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.
3. Coral reefs host far more number of animal phyla than those hosted by tropical rainforests.

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.downtoearth.org.in/climate-change/climate-change-drives-sharpest-great-barrier-reef-coral-loss-in-nearly-40-years>

17. Asiatic Lion

17. Which among the following statements is/are correct regarding the Asiatic Lion?

1. It is slightly larger and darker than the African lion.
2. Asiatic lions are naturally found in India only.
3. It is protected under the 'Endangered' category under IUCN.

Select the correct answer using the code given below:

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

Answer: (b) 2 and 3 only

Explanation:

In NEWS: India has set an example in lion conservation: Minister

Asiatic Lion (Panthera leo leo):

- The Asiatic Lion, also known as the Persian Lion or Indian Lion, is a member of the Panthera leo leo subspecies and is found only in India today. **Hence statement 2 is correct.**

- Once ranging across West Asia and the Middle East, the species is now regionally extinct outside India.

Key Features

- Slightly smaller and lighter than the African lion. **Hence statement 1 is incorrect.**
- A distinctive longitudinal belly fold, present in all Asiatic lions but rare in African lions.

- Males have shorter manes, allowing ears to remain visible.

Distribution

- Historical Range: Extended from West Bengal in the east to Rewa (Madhya Pradesh) and across the Middle East.
- Current Habitat: Confined to the Gir National Park and Wildlife Sanctuary in Gujarat, India.

Major Threats

- Low genetic diversity due to a single, isolated population.
- Vulnerability to epidemics, such as canine distemper or natural disasters.
- Poaching for illegal wildlife trade.
- Human-wildlife conflict, with locals killing lions in retaliation for attacks on livestock.

Protection Status

- IUCN Red List - **Endangered. Hence statement 3 is correct.**
- CITES - **Appendix I**
- Wildlife (Protection) Act, 1972 (India) - **Schedule I**

Conservation Efforts

Asiatic Lion Conservation Project (2018–2021)

- Launched by the Ministry of Environment, Forest and Climate Change (MoEFCC).
- Focuses on:
 - Scientific habitat and population management.
 - Disease surveillance and veterinary care.
 - Community participation and awareness.
 - Coordination with multi-sectoral agencies for long-term conservation.

PYQ REFERENCE:

Q. Consider the following statements:

1. Asiatic lion is naturally found in India only.
2. Double-humped camel is naturally found in India only.
3. One-horned rhinoceros is naturally found in India only.

Which of the statements given above is/are correct?

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

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/india-has-set-an-example-in-lion-conservation-bhupender-yadav/article69916801.ece>
<https://www.downtoearth.org.in/wildlife-biodiversity/world-lion-day-2025-why-panthera-leo-was-an-ideal-quarry-for-indias-mughal-sovereigns>

18. Algal Bloom

18. Consider the following statements:

1. An algal bloom is a rapid decrease in the population of algae in freshwater or marine water systems.
2. Algal blooms can be caused by nutrient pollution such as fertilizer runoff.

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: Sea of Galilee Turns Red

Algal Bloom:

- An algal bloom is a rapid increase or accumulation in the population of algae in freshwater or marine water systems. **Hence statement 1 is incorrect.**
- These blooms are often visible as a discoloration of the water due to the algae's pigments.
- Algal blooms can be caused by nutrient pollution, such as fertilizer runoff, and can have both beneficial and harmful effects on the ecosystem. **Hence statement 2 is correct.**

Sea of Galilee Turns Red:

- Freshwater lake in northern Israel, in the Jordan Rift Valley.
- Fed mainly by the Jordan River
- Botryococcus braunii (green algae, Chlorophyta group) produces carotenoid pigments which makes the algae turn red under strong sunlight.
- The unusual bloom is likely triggered by warmer water temperatures and nutrient enrichment (nitrogen, phosphorus).
- This algae is known for hydrocarbon production → studied for biofuel potential.
- It is not toxic to humans.





The Economist

Impacts of algal bloom:

- Extreme events like this have occurred before (e.g., Dead Sea 2022).
- Reduced light penetration → affects aquatic plants and biodiversity.
- Algae decomposition → oxygen depletion (hypoxia) → fish mortality risk.
- Loss of fisheries and aquaculture yields.
- Reduced tourism due to foul odour, scum.
- Skin rashes, respiratory problems, gastrointestinal illness (for HABs).
- Contaminates drinking water supplies.

Examples of Algal bloom:

- Sea of Galilee (2025) – Botryococcus braunii bloom caused red coloration; linked to warming water.
- Lake Erie (2014) – Cyanobacteria bloom contaminated drinking water in Toledo, USA.
- Arabian Sea (Noctiluca scintillans) – Green tide affecting fisheries.

PYQ REFERENCE:

Q. There is a concern over the increase in harmful algal blooms in the seawaters of India. What could be the causative factors for this phenomenon?

1. Discharge of nutrients from the estuaries.
2. Run-off from the land during the monsoon.
3. Upwelling in the seas.

Select the correct answer from the codes given below:

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

Source: <https://www.gktoday.in/sea-of-galilee-turns-red/>

19. Nilgiri Tahr

19. The species is a primary herbivore in high-altitude grasslands. It is endangered and endemic to the western ghats with its highest population at the Eravikulam National Park in Kerala. Which one of the following could be that animal?

- (a) Indian wild ass
- (b) Nilgiri Tahr
- (c) Indian gazelle
- (d) Lion-tailed macaque

Answer: (b) Nilgiri Tahr

Explanation:

In NEWS: Survey finds 1,365 Nilgiri tahrs in Kerala

Population of Nilgiri Tahr:

- A synchronized population survey conducted in April 2025 across Kerala and Tamil Nadu recorded a total of 2,668 Nilgiri tahrs, with 1,365 of them in Kerala—accounting for over half of the global population of the species
- Eravikulam National Park houses 841 tahrs, making it the strongest single population pocket in the state, slightly up from 827 in 2024. The Munnar landscape supports around 90% of Kerala's Nilgiri tahr population
- In Tamil Nadu, significant populations were found in Mukurthi National Park and Grass Hills National Park, underscoring the importance of interstate cooperation for effective conservation.
- It is considered sacred by some tribal communities and featured in ancient Sangam literature.
- It is a primary herbivore in high-altitude grasslands and an indicator of ecosystem health in montane habitats.



Nilgiri Tahr:

- It is endemic to the western ghats, mainly in Kerala and Tamil Nadu.
- It lives in montane grasslands and rocky cliffs at altitudes between 1,200–2,600 meters, especially in shola-grassland ecosystems.
- It is categorized as endangered by IUCN.
- It is the state animal of Tamil Nadu

Major Protected Areas:

- Eravikulam National Park (Kerala) – largest population
- Mukurthi National Park (Tamil Nadu)
- Grass Hills National Park (Tamil Nadu)

Key Threats:

- Habitat loss due to plantations and infrastructure
- Climate change affecting grasslands
- Invasive species like wattle and eucalyptus
- Fragmentation of populations

Conservation Practices:

- Controlled burning to rejuvenate grasslands (adopted from Muthuvan tribal knowledge)
- Standardized population surveys (Double Observer & Bounded Count methods)
- Interstate cooperation between Kerala & Tamil Nadu for habitat management

Hence option (b) is correct.

PYQ REFERENCE:

Q. A sandy and saline area is the natural habitat of an Indian animal species. The animal has no predators in that area but its existence is threatened due to the destruction of its habitat. Which one of the following could be that animal?

- (a) Indian wild buffalo
- (b) Indian wild ass**
- (c) Indian wild boar
- (d) Indian gazelle

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/survey-finds-1365-nilgiri-tahrs-in-kerala/article69897466.ece>

20. Geneva Plastics Treaty negotiations

20. Consider the following statements regarding the Geneva Plastics Treaty negotiations:

1. The negotiations are being spearheaded by the United Nations Environment Programme (UNEP).
2. The treaty aims to address plastic pollution only in oceanic environments.
3. India is part of the High Ambition Coalition (HAC) pushing for a cap on global plastic production.

Which of the statements given above is/are correct?

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

Answer: (a) 1 only

Explanation:

In NEWS: Rift between two blocs continues in Geneva Plastics Treaty negotiations

Global Plastics Treaty Negotiations:

● The representatives from over 190 countries will convene in Geneva, Switzerland, for negotiations on the first-ever Global Plastics Treaty.

● The aim is to establish a legally binding framework to end plastic pollution, including marine pollution.

● The negotiations are being spearheaded by the United Nations Environment Programme (UNEP). **Hence statement 1 is correct.**

● The treaty covers land and ocean pollution — not just oceans. **Hence statement 2 is incorrect.**

● The draft treaty currently contains 370 brackets, indicating unresolved agreements among countries.

● The treaty aims to be the most significant environmental agreement since the 2015 Paris climate agreement.

Key Objectives:

● Address plastic pollution at all stages, from production using oil and gas to waste disposal and recycling challenges.

● Resolve disagreements from the previous meeting in Busan, South Korea, focusing on:

- Capping the production of polymers.
- Eliminating harmful chemicals from plastic production.
- Phasing out harmful plastic products.
- Progress and Challenges

Main Points of Contention:

● **Production Caps:** Over 100 countries, including those in the High Ambition Coalition—endorse limits on plastic production and single-use bans. However, major fossil fuel-producing nations (China, Russia, Saudi Arabia, Iran, India) strongly oppose such caps, favoring downstream solutions like waste management. India aligns with the Like-Minded Countries (LMC). **Hence statement 3 is incorrect.**

● **Lifecycle Approach:** Many back a full lifecycle strategy that includes reducing production and harmful chemicals, but some countries, including the U.S., are lobbying to remove such language from the draft.

● **Lobbying Influence:** Campaigners warn of significant industry influence—there are at least 234 fossil fuel and plastics industry lobbyists present, outnumbering scientists and EU members, raising concerns over diluted treaty ambitions.

● **India's Position:** India is aligned with oil-producing states in opposing caps on production and lists of phased-out plastics.

PYQ REFERENCE:

Q. With reference to the 'New York Declaration on Forests', which of the following statements are correct?

1. It was first endorsed at the United Nations Climate Summit in 2014.
2. It endorses a global timeline to end the loss of forests.
3. It is a legally binding international declaration.
4. It is endorsed by governments, big companies and indigenous communities.
5. India was one of the signatories at its inception.

Select the correct answer using the code given below.

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

Source:

<https://www.thehindu.com/sci-tech/energy-and-environment/divisions-in-testy-plastics-trade-negotiations-underline-global-shifts-in-plastic-production/article69920658.ece>

21. Kaleshwaram Lift Irrigation Project

21. Consider the following pairs:

	Project	Associated River
1	Kaleshwaram Lift Irrigation Project	Godavari
2	Polavaram Project	Krishna
3	Sardar Sarovar Project	Narmada

Which of the pairs given above are correctly matched?

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

Answer: (a) 1 and 3 only

Explanation:

In NEWS: What is Telangana's Kaleshwaram project?

● Kaleshwaram Project is built on the **Godavari River in Telangana – Hence pair 1 is correct.**

● Polavaram Project is also on the **Godavari River, not Krishna – Hence pair 2 is incorrect.**

● Sardar Sarovar Project is constructed on the **Narmada River – Hence pair 3 is correct.**

1. Kaleshwaram Lift Irrigation Project – Godavari

● **Location:** Telangana

● **River:** Built on the **Godavari River**, specifically at the confluence of its Pranahita tributary.

● **Purpose:** To lift water to higher altitudes using pump houses and supply it to drought-prone regions of Telangana for irrigation and drinking.

● **Significance:** It's one of the **world's largest lift irrigation project**

2. Polavaram Project – Krishna

● **Correct River: Godavari River**

● **Location:** Andhra Pradesh

● **Purpose:** A multipurpose irrigation project intended to supply water for irrigation, hydroelectric power generation, and drinking.

● **Why confusion occurs:** Since it benefits the Krishna basin indirectly (through Godavari-Krishna linkage), it's often **mistakenly linked** to the Krishna River. But the dam is physically located on the **Godavari River**.

3. Sardar Sarovar Project – Narmada

● **Location:** Gujarat

● **River:** Built on the **Narmada River**

● **Purpose:** To provide irrigation water, drinking water, and hydroelectric power across Gujarat, Madhya Pradesh, Maharashtra, and Rajasthan.

● **Significance:** It is one of the most prominent river valley projects in India and part of the larger **Narmada Valley Development Project**.

PYQ REFERENCE:

Q. Which of the following pairs is/are correctly matched?

Dam	River
Tehri Dam	: Bhagirathi
Sardar Sarovar Dam	: Narmada
Nagarjuna Sagar Dam	: Cauvery

Select the correct answer using the code below:

- (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/telangana/what-is-telanganas-kaleshwaram-project-what-is-the-controversy-around-it-explained/article69900726.ece>

22. Fishing Cat

22. Consider the following statements regarding the Fishing Cat (*Prionailurus viverrinus*):

1. It is a nocturnal predator that often hunts by wading into shallow water and scooping fish with its paws.
2. It has been included under the Species Recovery Programme of the Ministry of Environment, Forest and Climate Change.
3. In India, it is listed under Schedule II of the Wildlife (Protection) Act, 1972.

Which of the above statements is/are correct?

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: In search of the elusive and threatened fishing cat

The Fishing Cat (*Prionailurus viverrinus*):

- The Fishing Cat (*Prionailurus viverrinus*) is a medium-sized wild felid adapted to wetland ecosystems, found across South and Southeast Asia, with strongholds in India, Bangladesh, Sri Lanka, and parts of Nepal, Myanmar, and Thailand.

- In India, it is most notably found in the **Sundarbans mangroves, Chilika Lake, Coringa Wildlife Sanctuary**, and several Ramsar sites in Eastern and North-Eastern states.

- It is the State Animal of West Bengal and is protected under **Schedule I of the Wildlife Protection Act, 1972**, enjoying the highest legal protection. **Hence statement 3 is incorrect.**

- The IUCN Red List classifies it as **Vulnerable** due to rapid wetland loss, pollution, aquaculture expansion, and human-wildlife conflict.

- Ecologically, the Fishing Cat is **nocturnal, solitary, and an excellent swimmer**, with partially webbed feet and a short, muscular tail aiding balance in marshy terrain.

Hence statement 1 is correct.

- Its diet is dominated by fish, but also includes frogs, crustaceans, rodents, birds, and occasionally domestic poultry, leading to conflict with local communities.

- Breeding occurs year-round in tropical regions, with gestation lasting around 63 days and litter sizes ranging from 1–4 cubs.

- Under the **Species Recovery Programme of the Ministry of Environment, Forest and Climate Change (MoEFCC)**, the Fishing Cat has been prioritised for population monitoring, habitat restoration, and community-based conflict mitigation in key landscapes such as the Sundarbans, Chilika, and Godavari-Krishna delta. **Hence statement 2 is correct.**

- Additional conservation measures include habitat restoration, community awareness campaigns, the Fishing Cat Project, wetland protection under the Ramsar Convention, and its listing in Appendix II of the Convention on Migratory Species (CMS).

PYQ REFERENCE:

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.thehindu.com/sci-tech/energy-and-environment/in-search-of-the-elusive-and-threatened-fishing-cat/article69896969.ece>

23. Environment Protection (Management of Contaminated Sites) Rules, 2025

23. With reference to contaminated site management in India, consider the following statements:

Statement I: Contamination from radioactive waste, mining operations, and oil pollution in the sea is exempted under the new contaminated site management rules.

Statement II: The contaminated site management rules mandate that once a contaminated site is identified, it must be restored to safe levels within three years.

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

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

Answer: (c) Statement-I is correct but Statement-II is incorrect

Explanation:

In NEWS: What are the new rules on chemically contaminated sites?

Environment Protection (Management of Contaminated Sites) Rules, 2025

1. Legal Framework & Purpose

- Notified by the Ministry of Environment, Forest and Climate Change on 25 July 2025 under the Environment (Protection) Act, 1986

- For the first time, India now has a legally binding structure to identify, assess, and remediate chemically contaminated sites, typically ones historically used for hazardous chemical dumping

2. Identification & Assessment Process

- District administrations must prepare and submit half-yearly reports listing “suspected contaminated sites” to SPCBs or designated reference organizations

- State Boards or Reference Organizations have 90 days for a preliminary assessment, followed by another 90 days for detailed surveys to confirm contamination—particularly focusing on the 189 hazardous chemicals listed under the 2016 Hazardous and Other Wastes Rules

- Confirmed contaminated sites must be publicly notified, and access restrictions imposed. ● The rules lay down specific timelines for:

- Identification of contaminated sites,
- Assessment (preliminary and detailed),
- Preparation of a remediation plan, and
- Assignment of liability to a “responsible person”.

- However, there is **no rigid 3-year deadline** mentioned in the rules for completion of remediation or restoration of a site to safe levels. **Hence statement II is incorrect.**

3. Remediation & Liability

- A reference organisation (an expert scientific body)

must draft a remediation plan tailored to the site

- A “responsible person”—the polluter—must be identified within 90 days and held liable for cleanup costs
- If the polluter is untraceable or insolvent, funding is shared between the Centre and State governments following a prescribed cost-sharing model

4. Criminal Accountability

- If contamination causes loss of life or environmental damage, criminal liability can be enforced under the Bharatiya Nyaya Sanhita (2023)

5. Exemptions

- The rules do not apply to contamination from:
 - Radioactive waste,
 - Mining operations,
 - Marine oil pollution,
 - Municipal solid waste dumps. **Hence statement I is correct.**
- However, if contamination from these sources exceeds specified risk thresholds, the rules may still apply.

6. Additional Institutional & Transparency Measures

- A centralised online portal, managed by the CPCB, will catalogue site information, assessments, plans, and remediation progress
- A Technical or Central Remediation Committee, comprising experts from various ministries and regulators, will oversee implementation and submit annual reports
- Public participation is mandated: local stakeholders must be invited to comment within 60 days of site listing, with final lists published in local newspapers

PYQ REFERENCE:

Q. As per the Solid Waste Management Rules, 2016 in India, which one of the following statements is correct?

- (a) Waste generator has to segregate waste five categories.
- (b) The Rules are applicable to notified urban local bodies, notified towns and all industrial townships only.
- (c) The Rules provide for exact and elaborate criteria for the identification of sites for landfills and waste processing facilities.**
- (d) It is mandatory the part of waste generator that the waste generated in one district cannot be moved to another district

Source:

<https://www.thehindu.com/sci-tech/energy-and-environment/what-are-the-new-rules-on-chemically-contaminated-sites-explained/article69917568.ece#:~:text=Under%20these%20rules%2C%20the%20district.days%20of%20being%20thus%20informed>

24. Star Fish

24. Ecological imbalance and rising sea surface temperatures in certain marine regions have resulted in mass mortality of starfish due to infections caused by *Vibrio pectenicida*. *Vibrio pectenicida* is a

- (a) Virus
- (b) Bacterium
- (c) Fungus
- (d) Protozoan

Answer: (b) Bacterium

Explanation:

In NEWS: In 12 years, 5 billion starfish ‘wasted away’ from a mysterious disease: How culprit was finally found

Mass mortality of starfish:

- Starfish (especially sunflower sea stars) were dying from a wasting disease, with over 5 billion starfish estimated to have died since 2013.
- The disease disrupted marine ecosystems, causing sea urchin populations to surge, which in turn devoured kelp forests, critical for marine life and carbon sequestration. ● The breakthrough came when ***Vibrio pectenicida*, a bacterium** related to the cholera-causing pathogen, was found in the coelomic fluid (starfish blood) of infected starfish. **Hence option (b) is correct.**
- Identifying the bacterium opens possibilities for treatments, such as probiotics to combat the bacteria or creating *Vibrio*-resistant starfish in labs for repopulation in the wild. ● This discovery will help guide efforts to restore starfish populations and stabilize affected marine ecosystems.



Starfish (Sea Stars) - Key Facts:

- Kingdom: Animalia; Phylum: **Echinodermata**; Class: Asteroidea
- They are **apex predators**. Starfish are crucial in marine ecosystems.
- They control populations of other organisms,

particularly sea urchins, which in turn affect the growth of kelp forests.

- They maintain the stability of the ecosystem by regulating species populations.
- Starfish are **carnivores** that primarily feed on mollusks (clams, oysters, etc.).
- They have a unique feeding method, using their **eversible stomach** to digest prey externally before pulling it back into their bodies.
- Starfish reproduce by sexual reproduction (external fertilization) or asexual reproduction (regenerating lost arms).
- They can **regenerate** lost limbs, and some species can regenerate their entire body from a single arm.

PYQ REFERENCE:

Q. Which one of the following is a filter feeder?

- (a) Catfish
- (b) Octopus
- (c) Oyster**
- (d) Pelican

Source:

<https://indianexpress.com/article/explained/everyday-explainers/5-billion-starfish-wasted-away-mysterious-disease-culprit-10173862/>

25. World Elephant Day 2025

25. Consider the following statements:

1. India is home to nearly 90% of the world's wild elephant population.
2. The World Elephant Day is celebrated every year on 12 August.

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: India Reaffirms Global Leadership in Elephant Conservation on World Elephant Day 2025

World Elephant Day 2025:

- World Elephant Day 2025 was celebrated on August 12th. **Hence statement 2 is correct.**
- The theme for 2025 was "Matriarchs & Memories", highlighting the vital role of female elephant leaders and the women working to protect them.

- The day aimed to raise global awareness about the threats faced by both African and Asian elephants and to advocate for their conservation and protection.

Key focus areas and concerns

- **Protecting Elephants:** The day emphasizes the urgent need to protect elephants from poaching, the illegal ivory trade, and habitat loss caused by deforestation, agriculture, mining, and human encroachment.
- **Human-Elephant Conflict (HEC):** A significant focus for 2025 was mitigating HEC, particularly in India which is home to nearly 60% of the world's wild elephant population. Project Elephant and initiatives like corridor development play a crucial role in safeguarding elephants and their habitats in India. **Hence statement 1 is correct.**
- **Conservation Efforts:** World Elephant Day encouraged supporting organizations and individuals working to safeguard elephants through awareness campaigns, fundraising, ethical tourism, and community-led conservation efforts.

PYQ REFERENCE:

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

1. The leader of an elephant group is a female.
2. The maximum gestation period can be 22 months.
3. An elephant can normally go on calving till the age of 40 years only.
4. Among the States in India, the highest elephant population is in Kerala.

Which of the statements given above is/are correct?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2155692>

26. Equator Initiative Award 2025

26. The Equator Prize is awarded annually to recognise Indigenous Peoples and local communities protecting biodiversity and promoting sustainable livelihoods is awarded by

- (a) UNFCCC
- (b) UNDP
- (c) UNEP
- (d) UNWCED

Answer: (b) UNDP

Explanation:

In NEWS: UNDP Announces Equator Prize 2025 Winners on the International Day of the World's Indigenous Peoples

- The Bibi Fatima Women's Self-Help Group (SHG) from Teertha village in Karnataka's Dharwad district won the prestigious Equator Initiative Award 2025.
- The United Nations Development Programme (UNDP) prize honours community-led nature-based solutions for sustainable development and climate resilience. **Hence option (b) is correct.**
- The Bibi Fatima SHG is the only Indian winner among ten global recipients from nine countries.

About the Equator Prize

- The Equator Prize is awarded annually by UNDP to recognise Indigenous Peoples and local communities protecting biodiversity and promoting sustainable livelihoods.
- The 2025 theme focused on Women and Youth Leadership for Nature-Based Climate Action. Winners were selected from over 700 nominations across 103 countries.
- Each winner receives USD 10,000 and global recognition, including participation in major UN events.

Source: <https://www.gktoday.in/equator-prize-2025/>
<https://www.undp.org/press-releases/undp-announces-equator-prize-2025-winners-international-day-worlds-indigenous-peoples>

27. Globally Important Agricultural Heritage Systems (GIAHS)

27. Consider the following sites:

1. The Koraput region in Odisha
2. The High altitude nomadic agriculture in the Rupshu Plateau of Ladakh
3. The Kuttanad farming system in Kerala
4. Terrace cultivation of aromatic rice of the Western Himalayas
5. The Saffron Heritage of Kashmir.

How many of the above sites are recognized as the Globally Important Agricultural Heritage Systems (GIAHS) sites in India by the FAO?

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

Answer: (b) 1, 3 and 5 only

Explanation:

In NEWS: NATIONAL POLICY TO PROMOTE GLOBALLY IMPORTANT AGRICULTURAL HERITAGE SYSTEMS (GIAHS) SITES IN INDIA

- As informed by Food and Agriculture Organization (FAO), India currently hosts three Globally Important Agricultural Heritage Systems (GIAHS): the Koraput region in Odisha, the Kuttanad farming system in Kerala, and the Saffron Heritage of Kashmir.

GIAHS Sites in India:

- Globally Important Agricultural Heritage Systems (GIAHS) are remarkable agricultural landscapes that combine **biodiversity, resilient ecosystems, and cultural heritage.**
 - These systems are characterized by **traditional farming practices, knowledge, and social structures** that have sustained communities and provided food and livelihoods for generations.
 - The **FAO (Food and Agriculture Organization of the United Nations)** established the GIAHS program to recognize and protect these unique systems, promoting sustainable development and cultural preservation.
 - **Global Recognition:**
 - The FAO has recognized over **70 GIAHS sites in 24 countries**, highlighting their global importance and promoting their conservation and adaptive management.
 - The Food and Agriculture Organization (FAO) recognizes three GIAHS locations in India:
 - **Koraput region, Odisha** – Known for highland subsistence paddy cultivation, rich paddy landrace diversity, medicinal plant genetic resources, and tribal traditional knowledge
 - **Kuttanad farming system, Kerala** – A unique below-sea-level wetland landscape integrating paddy cultivation, fishing, coconut gardens, and inland waters
 - **Saffron Heritage, Kashmir** – An agro-pastoral system blending traditional saffron cultivation, intercropping, and organic farming to support biodiversity and soil health
- Hence option (b) is correct.**

Support Through Indian Government Schemes

The Government of India supports these systems through several schemes:

- Jammu & Kashmir's Saffron Heritage is being revitalized via:
 - **Rashtriya Krishi Vikas Yojana (RKVY)**
 - **Mission for Integrated Development of Horticulture (MIDH)**
- Odisha (Koraput region): Focus on conserving biodiversity and preserving crop landraces; includes community seed banks and promotion of organic farming, with revival of neglected crops and forgotten foods
- Kerala (Kuttanad region): Under **RKVY-DPR** (Detailed Project Report) projects, two specific infrastructure initiatives are being implemented:

- 'Haritam Harippad' – Infrastructure development in various padasekharams (paddy tracts) in Alappuzha district.
- **Research support** – Assistance for ecological utilization of water hyacinth (Eichhornia crassipes) in Kuttanad

PYQ REFERENCE:

Q. The FAO accords the status of 'Globally Important Agricultural Heritage System (GIAHS)' to traditional agricultural systems. What is the overall goal of this initiative?

1. To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity.
2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapes, agricultural biodiversity and knowledge systems of the local communities
3. To provide Geographical Indication status to all the varieties of agricultural produce in such identifies GIAHS

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.pib.gov.in/PressReleasePage.aspx?PRID=2158029#:~:text=Schemes%20and%20policies%20of%20Government,Development%20of%20Horticulture%20\(MIDH\).](https://www.pib.gov.in/PressReleasePage.aspx?PRID=2158029#:~:text=Schemes%20and%20policies%20of%20Government,Development%20of%20Horticulture%20(MIDH).)

28. Saltwater crocodile

28. Consider the following statements with respect to the saltwater crocodile:

1. The saltwater crocodile is the largest living reptile and one of the most powerful predators on Earth which use the "death roll" technique to tear apart large prey.
2. As per the name, saltwater crocodiles thrive only in saltwater environments.
3. Since it is responsible for more human fatalities it is categorized as 'vermin' under the Wildlife Protection Act, 1972.

How many of the above statements are correct?

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

Answer: (a) Only one

Explanation:

In NEWS: Saltwater crocodile population in Bengal's Sundarban Biosphere Reserve shows substantial increase: survey

Saltwater crocodile:

- The saltwater crocodile (Crocodylus porosus) is the largest living reptile and one of the most powerful predators on Earth.
- Saltwater crocodiles are responsible for more human fatalities annually than any other crocodylian species. They are highly territorial and ambush predators, making them particularly dangerous near water bodies.
- They use the "death roll" technique to tear apart large prey. **Hence statement 1 is correct.**
- They are apex predators with a diet that includes:
 - Fish
 - Birds
 - Reptiles
 - Mammals (including water buffalo, monkeys, wild boar)
 - Occasionally sharks or humans
- **Habitat & Range:** Despite the name, saltwater crocodiles thrive in both saltwater and freshwater environments. **Hence statement 2 is incorrect.**
- They're found across:
 - Northern Australia
 - Indonesia
 - Papua New Guinea
 - Philippines
 - Eastern India and Sri Lanka
 - Bangladesh
 - Parts of Southeast Asia (e.g., Thailand, Vietnam)

Distribution in India

- Sundarbans, West Bengal Mangrove estuaries of the Ganges delta
- Bhitarkanika, Odisha Rivers, tidal creeks, estuaries (largest population)
- Andaman & Nicobar Islands Coastal mangroves, inland creeks, estuaries
- Tamil Nadu & Andhra Sparse populations in estuarine zones
- They are strong swimmers and have even been found hundreds of kilometers out at sea, helping explain their wide geographic range.

Length Males: up to 6–7 meters (20–23 ft); **Females:** up to 3 meters (10 ft)

Weight Males: up to 1,000–1,200 kg (2,200–2,600 lbs)

Lifespan : 70+ years (some exceed 100 years)

IUCN Status : Least Concern, but populations are protected in many regions

Wildlife Protection Act 1972: Schedule I (highest protection). **Hence statement 3 is incorrect.**

PYQ REFERENCE:

Q. Which one of the following is the national aquatic animal of India?

- (a) Saltwater crocodile
- (b) Olive ridley turtle
- (c) Gangetic dolphin**
- (d) Gharial

Source:

<https://www.thehindu.com/news/national/west-bengal/saltwater-crocodiles-thriving-in-sundarbans-213-direct-sightings-in-2025/article69951404.ece>

29. Jelly Fish

29. Consider the following statements with respect to Jellyfish:

1. They are Cnidarians
2. They have a brain but not a heart or bones.
3. They are carnivorous and eat even other jellyfish.
4. Dead jellyfish can liquefy into gels
5. Some can tolerate low-oxygen and low-salinity environments

How many of the above statements are correct?

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

Answer: (c) Only four

Explanation:

In NEWS: The spineless foe of nuclear power plants

Jellyfish:

- Jellyfish are marine invertebrates belonging to the phylum **Cnidaria**, class Scyphozoa (true jellyfish), though other related groups like Cubozoa (box jellyfish) and Hydrozoa are also called jellyfish. **Hence statement 1 is correct.**
- Their bodies are 95–98% water, and they have **no brain, heart, or bones.** **Hence statement 2 is incorrect.**
- They have a soft, bell-shaped body with tentacles that carry stinging cells (cnidocytes) used to capture prey or defend against predators.
- Found in oceans worldwide, from surface waters to the deep sea. Some **can tolerate low-oxygen and low-salinity environments.** **Hence statement 5 is correct.**

- They drift with ocean currents but can also pulsate to move.
- They are **carnivorous:** feed on small fish, plankton, crustaceans, and even other jellyfish. Use their tentacles to paralyze prey and bring it to their mouth. **Hence statement 3 is correct.**
- Jellyfish can reproduce both sexually and asexually.
- Some jellyfish can glow in the dark, thanks to bioluminescent proteins.

Ecological Importance

- Provide food for sea turtles, sunfish, and other marine animals.
- Help control zooplankton populations.
- Play a role in nutrient cycling in marine ecosystems.

Jellyfish Blooms (Swarming Events)

A "bloom" is a sudden population explosion, often seasonal.

Caused by:

- Climate change (warmer seas)
- Overfishing (removal of natural predators)
- Pollution/eutrophication (nutrient-rich water promotes jellyfish growth)
- Coastal development (ideal surfaces for polyps to attach)



How Jellyfish Disrupt Nuclear Power Plants

- Jellyfish swarms can **clog cooling water systems at coastal nuclear power plants**, leading to partial or complete shutdowns of reactors.
- Nuclear facilities often rely on seawater for cooling, which is drawn through intake systems filtered to prevent debris from entering.

- However, large jellyfish blooms, especially during warmer months, can overwhelm and jam these filters, compromising the cooling process.
- **In August 2025**, a massive jellyfish swarm clogged the filter drums at Gravelines, one of **Europe's largest nuclear plants**. This resulted in an automatic shutdown of four out of six reactors
- These disruptions are not isolated. Similar incidents have occurred in Scotland, Sweden, Japan, the U.S., and China, affecting both nuclear and coal-fired plants.
- More dangerously, **dead jellyfish can liquefy into gels** that bypass filters and clog deeper parts of cooling systems. **Hence statement 4 is correct.**

PYQ REFERENCE:

Q. Which of the following are detritivores?

1. Earthworms
2. Jellyfish
3. Millipedes
4. Seahorses
5. Woodlice

Select the correct answer using the code given below.

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

Source:

<https://indianexpress.com/article/explained/explain-ed-climate/nuclear-power-plants-jellyfish-10187058/>

30. The National River Conservation Plan (NRCP)

30. Consider the following statements:

1. The National River Conservation Plan (NRCP) was launched in 1995 to improve the water quality of polluted rivers in India.
2. The plan covers rivers other than the Ganga.
3. As of July 2025, the Pampa river was the latest addition to the National River Conservation Plan

How many of the statements given above are correct?

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

Answer: (a) Only one

Explanation:

In NEWS: Pampa on the path for inclusion in National River Conservation Plan

The National River Conservation Plan (NRCP):

- The National River Conservation Plan (NRCP) was **launched in 1995 to improve the water quality of polluted rivers in India. Hence statement 1 is correct.**
- The plan initially covered rivers other than the Ganga, which was addressed under the Ganga Action Plan (GAP).
- In 2005, **the GAP was merged with NRCP** to create a unified framework for river conservation across the country. **Hence statement 2 is incorrect.**
- The NRCP is implemented by the Ministry of Jal Shakti, specifically under the National River Conservation Directorate (NRCD).

Key components of the program include:

- Construction of Sewage Treatment Plants (STPs)
- Development of sewer networks
- Promotion of low-cost sanitation
- Solid waste management
- Riverfront development
- Public awareness campaigns
- As of recent data, NRCP has covered 34 rivers in 16 states across India.
- The program follows a cost-sharing model:
 - 60:40 between Centre and States
 - 90:10 for North Eastern and Himalayan states

Why Pampa?

The central government has initiated steps to include the Pampa River under the National River Conservation Plan (NRCP). Initiated, not yet included. **Hence statement 3 is incorrect.**

The Pampa River is **not only ecologically vital but also revered for its religious connections**—especially to the Sabarimala shrine and major gatherings like the Maramon and Cherukolpuzha conventions. It is often likened to the Ganga in its sacredness.

Present Challenges:

- Pollution from extensive waste dumping by local bodies.
- Erosion and degradation of riverbanks.

Conserving Pampa is vital for:

- Ecological health of the **Kuttanad and Vembanad wetland systems.**
- Cultural preservation around Sabarimala and significant religious gatherings.
- Mitigation of environmental threats such as pollution and erosion.
- Boosting local governance capacity through central support and technical guidance.

Pampa River:

- Pampa River is the **third longest river in the state of Kerala, India.**
- It originates from the Pulachimalai hill in the Western Ghats, located in the Peerumedu plateau of the Idukki district.
- The river flows through the districts of Pathanamthitta, Kottayam, and Alappuzha before **emptying into the Vembanad Lake.**
- The total length of the river is approximately 176 kilometers.
- Pampa is monsoon-fed, and its flow is seasonal, with significant volume during the Southwest monsoon (June–September).

Source:

- <https://www.gktoday.in/pampa-river-conservation-under-national-river-plan/>
- <https://www.newindianexpress.com/states/kerala/2025/Aug/20/pampa-on-the-path-for-inclusion-in-national-river-conservation-plan>

31. Royal Bengal tiger

31. Consider the following statements:

1. Kaziranga Tiger Reserve (KTR) has the third-highest tiger density in India after Bandipur Tiger Reserve and Corbett National Park.
2. As of now, India has 75 protected areas that have been designated as tiger reserves.
3. As per the section 38 of the Wild Life (Protection) Act, 1972, the state governments are responsible for preparing a Tiger Conservation Plan.

Which of the statements given above is/are correct?

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

Answer: (d) 1 and 3 only

Explanation:

In NEWS: Weeks after largest litter of Royal Bengal tiger cubs born in Delhi zoo in decades, only two of six survive

Royal Bengal tiger:

- The Bengal tiger is a population of the Panthera tigris tigris subspecies. It ranks among the largest of wild cats.
- It is distributed from India, southern Nepal, Bangladesh, Bhutan to Southwestern China.
- Its historical range extended to the Indus River valley until the early 19th century, and it is thought to have been

present in the Indian subcontinent since the Late Pleistocene about 12,000 to 16,500 years ago.

- It is threatened by poaching, habitat loss and habitat fragmentation.
- As of 2022, the Bengal tiger population was estimated at 3,167–3,682 individuals in India, 316–355 individuals in Nepal, 131 individuals in Bhutan and around 114 individuals in Bangladesh.

Major Habitats in India

- Sundarbans (West Bengal) – only mangrove habitat of tigers.
- Jim Corbett National Park (Uttarakhand) – India’s first tiger reserve.
- Ranthambore (Rajasthan) – famous for tiger sightings.
- Bandhavgarh & Kanha (Madhya Pradesh) – high tiger density.
- Kaziranga & Manas (Assam) – third-highest tiger density in India after Bandipur Tiger Reserve and Corbett National Park. **Hence statement 1 is correct.**
- Nagarhole & Bandipur (Karnataka) – part of Western Ghats tiger landscape.

Conservation

- In India the tiger reserves were set up as a part of **Project Tiger** initiated in 1973 and are administered by the **National Tiger Conservation Authority** of Government of India.
- As of March 2025, there are 58 protected areas that have been designated as tiger reserves. **Hence statement 2 is incorrect.**
- As of 2023, there were 3,682 wild tigers in India, which is almost 75% of the world's wild tiger population.
- As per the section 38 of the **Wild Life (Protection) Act, 1972**, the state governments are responsible preparing a Tiger Conservation Plan which includes planning and management of notified areas and maintaining the requisite competent staff to ensure the protection of the tiger reserve and providing inputs for maintaining a viable population of tigers, co-predators and prey animals. **Hence statement 3 is correct.**



PYQ REFERENCE:

Q. Among the following Tiger Reserves, which one has the largest area under “Critical Tiger Habitat”?

- (a) Corbett
- (b) Ranthambore
- (c) Nagarjunasagar-Srisailem**
- (d) Sundarbans

Source:

<https://indianexpress.com/article/cities/delhi/week-s-after-largest-litter-of-royal-bengal-tiger-cubs-born-in-delhi-zoo-in-decades-only-two-of-six-survive-10205955/>

32. 7 species of Big cats

32. Consider the following pairs:

Big cat species	IUCN Status
1. Tiger	Vulnerable
2. Lion	Vulnerable
3. Leopard	Vulnerable
4. Cheetah	Vulnerable

How many of the pairs given above are correctly matched?

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

Answer: (b) Only two

Explanation:

In NEWS: Nepal joins India-led initiative to protect 7 species of big cats

- Nepal has officially joined the International Big Cat Alliance (IBCA), an India-led global initiative to protect seven species of big cats.
- IBCA is a multi-country, multi-agency coalition of over 90 big cat range countries and non-range countries with an interest in big cat conservation.

7 Big Cats of the World:



Tiger (Panthera tigris)

- Found in India → Bengal Tiger (Panthera tigris tigris).
- Largest big cat in the world.
- IUCN: Endangered. **Hence pair 1 is incorrect.**

Lion (Panthera leo)

- Found in India → Asiatic Lion (Panthera leo persica), restricted to Gir, Gujarat.
- IUCN: Endangered. **Hence pair 2 is incorrect.**

Jaguar (Panthera onca)

- Not found in India (native to Central & South America).
- IUCN: Near Threatened.

Leopard (Panthera pardus)

- Found in India → Indian Leopard (Panthera pardus fusca).
- IUCN: Vulnerable. **Hence pair 3 is correct.**

Snow Leopard (Panthera uncia)

- Found in India → high Himalayas (J&K, Ladakh, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh).
- IUCN: Vulnerable.

Cheetah (Acinonyx jubatus)

- Not in the Panthera genus but included among “big cats.”
- Reintroduced in India (2022) from Namibia/South Africa at Kuno National Park, MP.
- IUCN: Vulnerable. **Hence pair 4 is correct.**

Clouded Leopard (Neofelis nebulosa)

- Found in India → Northeastern states (Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland, Tripura, Sikkim).
- Arboreal and highly elusive.
- IUCN: Vulnerable.

PYQ REFERENCE:

Q. Lions do not have a particular breeding season.

1. Unlike most other big cats, cheetahs do not roar.
2. Unlike male lions, male leopards do not proclaim their territory by scent marking.

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 2

Source:

<https://epaper.hindustantimes.com/Home/ShareArticle?OrgId=258034aa8bd&imageview=0#:~:text=Kathmandu%20%3A%20Nepal%20has%20officially%20joined,interest%20in%20big%20cat%20conservation.>

33. Arogyapacha

33. It is an endangered small evergreen medicinal plant endemic to the Agasthya Hills of the Western Ghats (Kerala), traditionally used by the Kani tribe as an “energy plant” for enhancing stamina, vitality and immunity, gained scientific recognition for leading to the development of the herbal drug ‘Jeevani’.

The above mentioned description is about

- (a) Alfalfa
(b) Amaranth
(c) Arogyapacha
(d) Malabar spinach

Answer: (c) Arogyapacha

Explanation:

In NEWS: Remembering Kuttimathan Kani, the forest elder who gave a wonder herb to the world but died in poverty



Arogyapacha (Trichopus zeylanicus travancoricus)

- Botanical identity – Arogyapacha is a small evergreen medicinal plant, scientifically known as Trichopus zeylanicus travancoricus.
- Geographical distribution –
 - Endemic to the Agasthya Hills of the Western Ghats (Kerala).
 - Grows in the shady, moist forest floors.
- Ethnomedicinal importance –
 - Traditionally used by the Kani tribal community.
 - Known as the “energy plant” or “ginseng of Kerala”.
 - The leaves are believed to improve stamina, vitality, and immunity.
- Scientific recognition –
 - Gained attention when researchers studying the Kani tribe discovered its use in providing instant energy and reducing fatigue.
 - Led to the development of the herbal drug ‘Jeevani’, a restorative, anti-stress, and immuno-enhancing formulation.
- Conservation concerns –
 - Overharvesting due to commercial demand threatened its survival.
 - Now categorized as an endangered species, needing in-situ and ex-situ conservation.

Hence option (c) is correct.

Source: <https://www.downtoearth.org.in/wildlife-biodiversity/remembering-kuttimathan-kani-the-forest-elder-who-gave-a-wonder-herb-to-the-world-but-died-in-poverty>

ECONOMY

1. Banking Laws (Amendment) Act, 2025

1. Consider the following statements:

1. Directors of central cooperative banks may also serve on state cooperative bank boards where they hold membership.
2. Banks now report to RBI every Friday instead of month-end/final fortnight/quarter.
3. Account/locker holders may appoint up to four nominees.
4. The Central Government is empowered to further revise "substantial interest" threshold by notification.

How many of the above changes were brought under the recent Banking Laws (Amendment) Act, 2025?

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

Answer: (c) Only three

Explanation:

In NEWS: Key Provisions of the Banking Laws (Amendment) Act, 2025 to come into effect from 1st August 2025

The Banking Laws (Amendment) Act, 2025:

- The Banking Laws (Amendment) Act, 2025 contains a total of 19 amendments across five legislations, the Reserve Bank of India Act, 1934, Banking Regulation Act, 1949, State Bank of India Act, 1955 and Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970 and 1980.
- The Key Provisions of the Banking Laws (Amendment) Act, 2025 will come into effect from 1st August 2025. The Banking Laws (Amendment) Act, 2025 was notified on 15th April 2025.

The amendments aim to:

1. **Redefined "Substantial Interest" threshold:** Raised from ₹5 lakh (since 1968) to ₹2 crore to modernize governance norms
2. **Extended Director Tenure in Cooperative Banks:** Maximum tenure increased from 8 to 10 years (excluding chairperson & whole-time directors)
3. **Cross-institutional Directorship Permitted:** Directors of central cooperative banks may also serve on state cooperative bank boards where they hold membership. **Hence statement 1 is correct.**

4. **Transfer of Unclaimed Assets to IEPF:** PSBs may now transfer unclaimed shares, dividends, bond interest/redemption amounts to the Investor Education and Protection Fund
5. **Statutory Auditor Remuneration:** PSBs can directly fix statutory auditors' pay rather than RBI determining it
6. **Revised Reporting Schedule:** Banks now report to RBI at month-end/final fortnight/quarter, instead of every Friday. **Hence statement 2 is incorrect.**
7. **Fortnight Definition for CRR Purposes:** Redefined under RBI Act: 1-15 and 16-month-end cycles instead of Friday-based cycle
8. **Increased Nominees:** Account/locker holders may appoint up to four nominees (instead of one). **Hence statement 3 is correct.**
9. **Nomination Priority Rules Laid Out:** Successive/simultaneous nominee appointment hierarchy and percentage split detailed
10. **Alignment with 97th Constitutional Amendment:** Cooperative bank governance updated accordingly
11. **Enhanced Investor Protection via IEPF Rules:** Unclaimed financial instruments now align with Companies Act 2013 practice
12. **Autonomy for Banks in Audit Selection:** More flexibility for PSBs to contract qualified auditors
13. **Freed-Up Regulatory Burden:** Reduces frequent submissions to RBI easing bank operations
14. **Governance Continuity in Cooperative Banks:** Ensuring consistency in board tenure
15. **Monetary Threshold Revision Delegation Clause:** Central Government empowered to further revise "substantial interest" threshold by notification. **Hence statement 4 is correct.**
16. **Improved Audit Standards in PSBs:** Encouraging higher audit quality via open remuneration
17. **Reporting Cadence Rationalization:** Shift to calendar-based reporting across all banks
18. **Risk Mitigation for Dormant Assets:** Investor safeguards increased by enabling unclaimed transfers
19. **Broad Objective:** Enhance depositor/investor protection, improve bank governance, align cooperative banks with constitutional standards, and modernize audit and reporting practices

PYQ REFERENCE:

Q. With reference to 'Urban Cooperative Banks' in India, consider the following statements:

1. They are supervised and regulated by local boards set up by the state Governments.
2. They can issue equity shares and preference shares.
3. 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?

- 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=2150371>

2. Money Laundering

2. Consider the following statements with respect to the legal frameworks preventing money laundering in India:

1. The Prevention of Money Laundering Act (PMLA), 2002 aims at preventing and controlling money laundering and recovering assets derived from such crimes.
2. The Directorate of Revenue Intelligence (DRI) is the primary agency responsible for enforcing the Prevention of Money Laundering Act (PMLA), 2002 in India.
3. India has signed Double Taxation Avoidance Agreements with about 85 countries to prevent money laundering.

How many of the above statements are correct?

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

Answer: (b) Only two

In NEWS: How should money laundering be tackled?

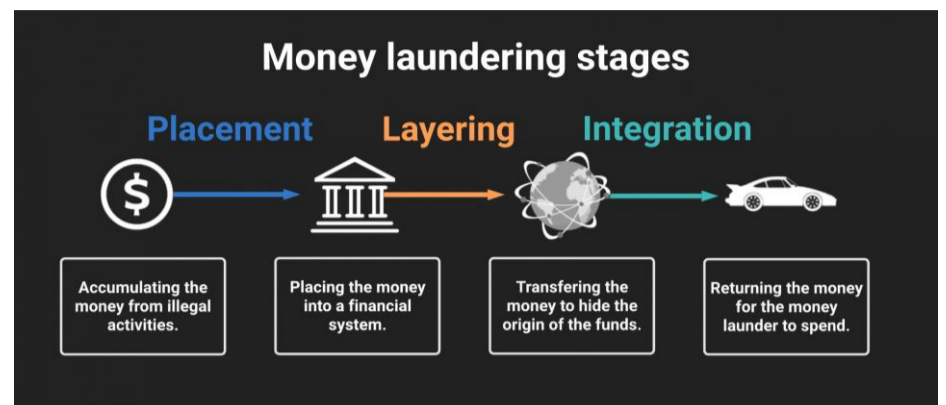
Finance Minister report in the Rajya Sabha:

- 5,892 cases have been taken up by the **Enforcement Directorate (ED)** under the **Prevention of Money Laundering Act (PMLA), 2002**, since 2015.
- Out of these, only **15 convictions** have been ordered by special courts.
- However, the low conviction rate and rising number of cases highlight concerns over the effectiveness of the law's implementation.

Definition of Money Laundering (Section 3 of PMLA Act):

Money laundering is defined as possessing, concealing, acquiring, using, or projecting proceeds of crime as untainted property.

Three stages through which money is laundered:



The Prevention of Money Laundering Act (PMLA), 2002:

- The Prevention of Money Laundering Act (PMLA), 2002 is a key piece of Indian legislation aimed at preventing and controlling money laundering and recovering assets derived from such crimes.
- **The Enforcement Directorate (ED)** is the primary agency responsible for enforcing the Prevention of Money Laundering Act (PMLA), 2002 in India.
- **Key Objectives of PMLA:**
 - Prevent money laundering.
 - Confiscate and seize property obtained from laundered money.
 - Punish those involved in laundering money from criminal activities.
 - Ensure India's compliance with international anti-money laundering standards, like those set by the Financial Action Task Force (FATF).

The role of Double Taxation Avoidance Agreement (DTAA):

- A Double Taxation Avoidance Agreement (DTAA) is a treaty between two or more countries to avoid taxing the same income twice - once in the country where it is earned and again in the country where the person resides.
- India has signed DTAA's with about 85 countries, including the **USA, UK, Germany, France, UAE, Singapore, and Mauritius.**
- These agreements aim to:
 - Prevent the same income from being taxed twice, promoting transparency.
 - Facilitate the exchange of financial and tax-related information between the tax authorities of participating nations.
- By promoting information sharing and cooperation, DTAA:
 - Helps detect and **prevent tax evasion and illegal money transfers.**
 - Strengthens the enforcement of anti-money laundering laws.
 - This is crucial in addressing **cross-border financial crimes**, including **money laundering and terror financing.**

Source:

<https://www.thehindu.com/news/national/how-should-money-laundering-be-tackled-explained/article69898777.ece#:~:text=It%20is%20important%20that%20the,enhance%20the%20rate%20of%20conviction.>

3. Tariff on Indian imports

3. Recently, the US President imposed an additional 25 per cent tariff on Indian imports, raising the total levy on Indian goods to 50 per cent. In this context, what are all the impacts of high tariffs on the Indian economy?

1. Indian goods become more expensive
2. Widen the trade and current account deficit.
3. Increase in India's exports to US
4. Discourage FDI from U.S. firms in Indian manufacturing

Select the correct answer using the code given below.

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

Answer: (d) 1, 2 and 4

Explanation:

In NEWS: Trump hikes levy on Indian imports to 50%

- President Donald Trump imposed an additional 25% tariff on Indian goods.
- Combined, India now faces a 50% total tariff, the highest of any country, tied with Brazil.
- The U.S. claims India is "directly or indirectly" importing oil from Russia, violating the intent of Executive Order 14066 related to sanctions on Russia.
- The move is framed as a penalty for not aligning with U.S. foreign policy on Russia-Ukraine.

THE IMPACT OF IMPOSING HIGH TARIFF TO INDIA

Decline in Exports

- U.S. is one of India's largest export destinations. **Hence statement 3 is incorrect.**
- Over 55% of Indian exports to the U.S. are now affected.
- Sectors like pharmaceuticals, textiles, gems & jewelry, engineering goods, and auto parts will face reduced demand due to higher prices.

Loss of Competitiveness

- Indian goods become 30–35% more expensive compared to competitors like Vietnam, Mexico, Bangladesh, China. **Hence statement 1 is correct.**

- U.S. buyers may shift to cheaper alternatives, causing a decline in market share for Indian exporters.

Job Losses

- Export-driven industries in India employ millions.
- A sharp fall in U.S. demand could lead to:
- Layoffs in MSMEs (Micro, Small & Medium Enterprises)
- Reduced wages or production cuts in labor-intensive sectors

Widening Trade Deficit

- India could face a reduction in foreign exchange earnings.
- Combined with high global oil prices, this may widen the trade and current account deficit. **Hence statement 2 is correct.**

Strained India-U.S. Relations

- The move signals growing trade friction despite strong strategic ties (e.g., QUAD, Indo-Pacific).
- May slow down or derail the Bilateral Trade Agreement (BTA) currently under negotiation.

Pressure to Reduce Russian Oil Imports

- Tariffs are explicitly linked to India's continued oil purchases from Russia.
- U.S. may leverage trade tools to push India into aligning with its foreign policy objectives.
- However, India insists these purchases are based on energy security, not politics.

Impact on Investment Climate

- Tariff hike may discourage FDI from U.S. firms in Indian manufacturing. **Hence statement 4 is correct.**
- Creates uncertainty for multinationals using India as a global export hub.
- Could slow Make in India and PLI (Production-Linked Incentive) scheme outcomes.

PYQ REFERENCE:

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://indianexpress.com/article/india/india-50-percent-highest-us-tariff-joins-brazil-trump-trade-tariff-full-list-10173966/>

4. The Monetary Policy Committee (MPC)

4. With reference to the Monetary Policy Committee, consider the following statements:

1. The Union Finance Minister is the ex officio chairperson of the committee.
2. It also comprises three officials of the Reserve Bank of India as the members of the committee.
3. The Governor of the Reserve Bank of India has the casting vote in case of a tie in decision making.

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: (b) 2 and 3 only

Explanation:

In NEWS: MPC holds repo rate at 5.5%, maintains GDP growth at 6.5%, inflation projected at 3.1%

The Monetary Policy Committee:

- The Monetary Policy Committee is responsible for fixing the benchmark interest rate in India.
- The meetings of the Monetary Policy Committee are held at least four times a year (specifically, at least once a quarter) and it publishes its decisions after each such meeting.
- The committee comprises six members – three officials of the Reserve Bank of India and three external members nominated by the Government of India. **Hence statement 2 is correct.**
- The Governor of the Reserve Bank of India is the ex officio chairperson of the committee. **Hence statement 1 is incorrect.**
- Decisions are taken by majority with the governor having the casting vote in case of a tie. **Hence statement 3 is correct.**
- The current mandate of the committee is to maintain 4% annual inflation until 31 March 2026 with an upper tolerance of 6% and a lower tolerance of 2%.

PYQ REFERENCE:

Q. Which of the following statements is/are correct regarding the Monetary Policy Committee (MPC)?

1. It decides the RBI's benchmark interest rates,
2. It is a 12-member body including the Governor of RBI and is reconstituted every year.
3. It functions under the chairmanship of the Union Finance Minister.

Select the correct answer using the code given below:

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

Source: <https://www.thehindu.com/business/mpc-holds-repo-rate-at-55-maintains-gdp-growth-at-65-inflation-projected-at-31/article69901297.ece>

5. Uranium Oxide

5. What is common to the places known as Jaduguda, Tummalapalle, Domiasiat, Peddagattu, Lambapur and Rohil?

- (a) Major uranium deposits
(b) Tropical rain forests
(c) Underground cave systems
(d) Water reservoirs

Answer: (a) Major uranium deposits

Explanation:

In NEWS: PARLIAMENT QUESTION: URANIUM OXIDE RESOURCE IN THE COUNTRY

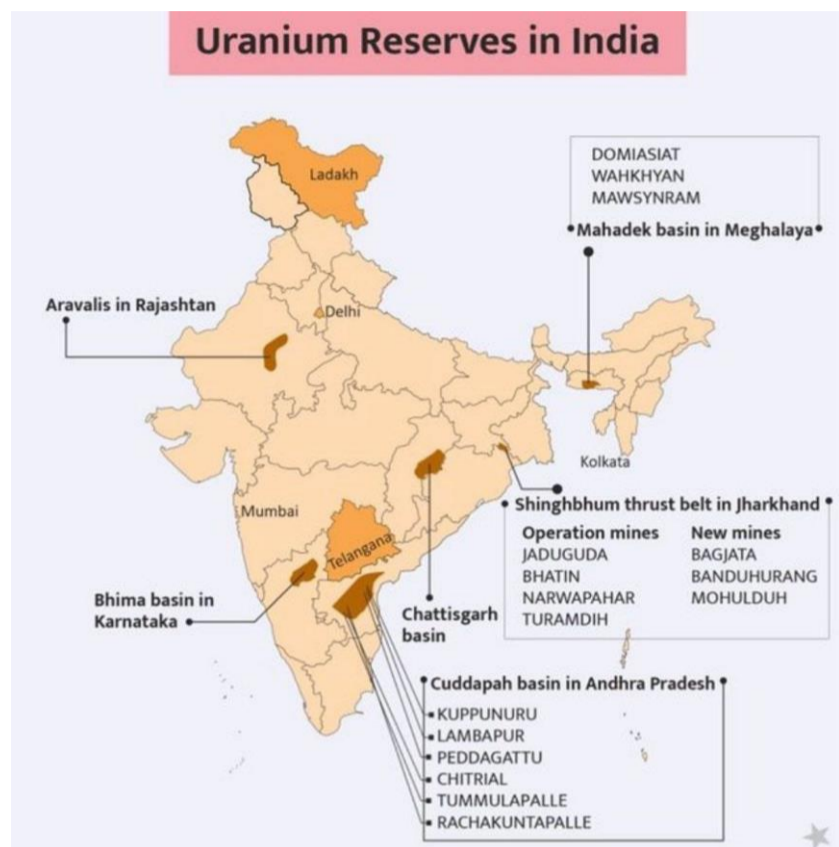
Uranium Oxide:

- Uranium Oxide is commonly known as Yellowcake (in powder form, after milling uranium ore)
- It is a stable, non-volatile compound of uranium and it is used as the standard form for expressing uranium ore reserves.
- It is obtained after mining uranium ore, crushing, and chemical processing to concentrate uranium content.

Uranium Oxide Resources in India:

- Exploration Agency: Atomic Minerals Directorate for Exploration and Research (AMD) under Department of Atomic Energy (DAE).
- As of 2025:
 - Total in-situ resource: 4,33,800 tonnes U_3O_8
 - Number of deposits: 47
- **Major States:** Andhra Pradesh, Telangana, Jharkhand, Meghalaya, Rajasthan, Karnataka, Chhattisgarh, Uttar Pradesh, Uttarakhand, Himachal Pradesh, Maharashtra.
- **Major Deposits:**
 - Jaduguda, Bhatin, Narwapahar, Turamdih (Jharkhand)
 - Tummalapalle (Andhra Pradesh) – one of the largest reserves
 - Domiasiat (Meghalaya)
 - Peddagattu, Lambapur (Telangana)
 - Rohil (Rajasthan)

- Recent Discovery (2025): 26,437 tonnes in-situ U_3O_8 at Jaduguda North – Baglasai-Mechua deposit (Jharkhand) → extends mine life. **Hence option (a) is correct.**



Applications:

- **Nuclear Power Generation:** U_3O_8 → converted to uranium hexafluoride (UF_6) for enrichment → uranium dioxide (UO_2) fuel pellets for nuclear reactors.
- **Isotope Production:** Uranium-235 → nuclear fuel; Uranium-238 → breeder reactors to produce Plutonium-239.
- **Defense Applications:** Enriched uranium used in naval propulsion and nuclear weapons (India uses low-enriched uranium for civilian power; weapons-grade uranium is separate & strategic).
- **Research & Medical Uses:** Radioisotopes from uranium for cancer treatment, industrial radiography, and scientific research.

Significance:

- India's nuclear programme (esp. **Pressurised Heavy Water Reactors – PHWRs**) relies on natural uranium.
- Indigenous uranium **reduces reliance on imports** from countries like Kazakhstan, Canada, Australia.
- Uranium is a **dual-use material** with both civilian and strategic importance.
- Mining activities **create local jobs** and infrastructure in resource-rich states.
- Nuclear power is low-carbon, aiding India's **clean energy targets**.

PYQ REFERENCE:

Q. Consider the following statements:

Statement-I: India, despite having uranium deposits, depends on coal for most its electricity production.

Statement-II: Uranium, enriched to the extent at least 60%, is required for the production of electricity.

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.pib.gov.in/PressReleasePage.aspx?PRID=2153552>

6. M S Swaminathan

6. M. S. Swaminathan is often referred to as the "Father of the Indian Green Revolution" primarily because:

- (a) He developed the first Indian genetically modified crop
- (b) He introduced organic farming on a large scale
- (c) He promoted high-yielding varieties of wheat and rice during the 1960s
- (d) He introduced the zero-budget natural farming model in India

Answer: (c) He promoted high-yielding varieties of wheat and rice during the 1960s

Explanation:

In NEWS: Prime Minister Shri Narendra Modi addresses the M.S. Swaminathan Centenary International Conference

Mankombu Sambasivan Swaminathan:

- M.S. Swaminathan (1925–2023) was a pivotal figure in Indian agriculture, renowned as a geneticist, plant breeder, and humanitarian.
- He was a key architect of India's Green Revolution, collaborating with Norman Borlaug to introduce high-yielding wheat and rice varieties, averting famine in India and Pakistan during the 1960s. **Hence option (c) is correct.**

● **Legacy:** Known as the "**Father of Economic Ecology**" (UN Environment Programme)

Key Contributions

- **Green Revolution Architect:** Led the introduction of high-yielding wheat and rice varieties in India during the 1960s, collaborating with Norman Borlaug.

- **Food Security Champion:** His efforts helped India move from famine-prone to self-sufficient in food production.
 - **Scientific Leadership:**
 - Director General of Indian Council of Agricultural Research (ICAR)
 - Director General of International Rice Research Institute (IRRI)
 - Principal Secretary in the Ministry of Agriculture and Irrigation
- Awards and Honors**
- Bharat Ratna (2024): India's highest civilian award.
 - World Food Prize (1987): First recipient.
 - Shanti Swarup Bhatnagar Award
 - Ramon Magsaysay Award
 - Albert Einstein World Science Award
 - Time Magazine (1999): One of the 20 most influential Asians of the 20th century, alongside Gandhi and Tagore.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2153429>

<https://www.thehindu.com/news/national/ready-to-pay-personal-price-to-protect-farmers-interest-pm-modi/article69904122.ece>

7. Retail inflation

7. With reference to the Indian economy, Retail inflation can be caused/ increased by which of the following?

1. Low demand and high supply
2. Increase in input costs
3. Rise in global commodity prices

Select the correct answer using the code given below.

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

Answer: (d) 2 and 3

Explanation:

In NEWS: Retail inflation hits 8-year low of 1.55% as food prices drop

Retail inflation:

- Retail inflation, primarily measured by the Consumer Price Index (CPI), indicates the rate at which the prices of goods and services purchased by households are increasing over time. It essentially reflects the change in the cost of living for the average consumer.

- Example: If the CPI increases by 3% in a year, it means that, on average, the cost of goods and services has increased by 3% compared to the previous year.

- Measured by: Ministry of Statistics and Programme Implementation (MoSPI)

- Base year: 2012 (currently, but a revision is planned)

Importance:

- Used by the Reserve Bank of India (RBI) to set monetary policy under the Inflation Targeting Framework.
- Target set under Monetary Policy Framework Agreement: 4% ($\pm 2\%$ tolerance band).

Types of CPI in India:

- CPI (Rural)
- CPI (Urban)
- CPI (Combined) – used for inflation targeting

Causes of retail inflation:

- Demand-pull factors (high demand, low supply).

Hence statement 1 is incorrect.

- Cost-push factors (increase in input costs)

- Imported inflation (rise in global commodity prices, exchange rate depreciation). **Hence statements 2 and 3 are correct.**

PYQ REFERENCE:

Q. With reference to Indian economy, demand-pull inflation can be caused/ increased by which of the following?

1. Expansionary policies
2. Fiscal stimulus
3. Inflation-indexing wages
4. Higher purchasing power
5. Rising interest rates

Select the correct answer using the code given below.

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

Source:

<https://www.thehindu.com/business/Economy/retail-inflation-in-july-slips-to-8-year-low-of-155/article69923949.ece>

8. Soybean production in the world

8. Consider the following statements:

Statement I: Of the two major soybean producers in the world, i.e., Brazil and the United States of America, the former produces more soybean than the latter.

Statement II: China is the largest soy importer in the world.

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

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I

Explanation:

In NEWS: U.S. losing out on China soybean sales as Brazil fills in

Soyabean purchases by China:

Shift in Chinese Purchases:

- China is the largest soy importer in the world, but has been shunning U.S. beans for South American ones on the back of trade and diplomatic tensions. **Hence statement II is correct.**
- For September 2025, China booked ~8 million metric tons of soybeans entirely from South America.
- For October 2025, ~4 million tons booked, half their requirement — also from South America.

Impact on U.S. Exporters:

- Traditionally, China buys most U.S. soybeans from Sept–Jan, before Brazilian harvest.
- This year’s early, heavy Q3 purchases from Brazil may reduce U.S. sales by billions of dollars.
- If trade tensions persist, Chicago soybean futures could remain near five-year lows.

Reasons for Shift:

- Beijing’s 23% tariff on U.S. soybeans makes them uncompetitive despite being ~\$40/ton cheaper (pre-tariff) than Brazilian cargoes.
- China has built large inventories to cover potential Q4 risks.
- Long-term policy since U.S.–China trade war (2018) to diversify away from U.S. supplies.

Recent Milestones (2022–2024):

- 2022 world production was approximately 348.9 million tonnes, with Brazil at 35% and the U.S. at 33% of the total
- By 2023, production rose to 398.2 million tonnes, a 20.1 million-ton increase from 2022; Brazil (39.2%), the U.S. (28.5%), and Argentina (12.6%) led the pack. **Hence statement I is correct but Statement II does not explain Statement I.**
- Forecasts for the 2023/24 season put production around 395 million tonnes—a record high, boosted by strong South American crops

Leading Producers & Shifting Market Share

Top contributors (2023 data):

- Brazil: ~156 million tonnes (39.2%)
- U.S.: ~113 million tonnes (28.5%)
- Argentina: ~50 million tonnes (12.6%)
- China: ~20.8 million tonnes (5.2%)

PYQ REFERENCE:

Q. Consider the following statements:

Statement I: Of the two major ethanol producers in the world, i.e., Brazil and the United States of America, the former produces more ethanol than the latter.

Statement II: Unlike in the United States of America where corn is the principal feedstock for ethanol production, sugarcane is the principal feedstock for ethanol production in Brazil

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://www.thehindu.com/business/Economy/soybeans-rise-after-trump-says-he-wants-china-to-buy-more-us-beans/article69918867.ece>

9. Small Finance Bank

9. With reference to the regulations of Small Finance Bank, consider the following statements:

1. At least 75% of their Adjusted Net Bank Credit (ANBC) must be allocated to priority sectors, and a minimum of 50% of their loan portfolio should be loans up to ₹25 lakh.
2. The minimum paid-up capital is ₹200 crore.
3. At least 25% of branches must be in unbanked rural centers.
4. SFBs cannot establish subsidiaries for non-banking financial services.

How many of the above statements are correct?

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

Answer: (d) All four

Explanation:

In NEWS: Recently, the RBI decided to grant 'in-principle' approval to AU Small Finance Bank for transitioning from a small finance bank (SFB) to a universal bank

Small Finance Banks (SFBs) in India:

- Small Finance Banks (SFBs) in India are a type of bank established by the Reserve Bank of India (RBI) with the primary goal of promoting financial inclusion.
- They focus on serving segments of the economy typically underserved by traditional commercial banks, such as small business units, marginal farmers, micro and small industries, and entities in the unorganized sector.

Key features and objectives

- **Financial Inclusion:** The core objective is to extend basic banking services to unbanked and underbanked areas, particularly rural and semi-urban regions.
- **Basic Banking Services:** They offer essential services like accepting various types of deposits and providing credit.

Regulation: SFBs are regulated by the RBI and governed by relevant acts.

- **Priority Sector Lending (PSL) Focus:** At least 75% of their Adjusted Net Bank Credit (ANBC) must be allocated to priority sectors, and a minimum of 50% of their loan portfolio should be loans up to ₹25 lakh.
- **Capital Requirements:** The minimum paid-up capital is ₹200 crore.
- **Branch Expansion:** At least 25% of branches must be in unbanked rural centers.
- **No Subsidiaries:** SFBs cannot establish subsidiaries for non-banking financial services.
- **Potential for Transition:** They may transition to universal banks after five years, meeting specific RBI criteria. **Hence all the statements are correct.**

PYQ REFERENCE:

Q. What is the purpose of setting up of Small Finance Banks (SFBs) in India?

1. To supply credit to small business units
2. To supply credit to small and marginal farmers
3. To encourage young entrepreneurs to set up business particularly in rural areas.

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://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-10184119/>

[small-finance-bank-universal-bank-rbi-nbfc-upsc-10184119/](https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-10184119/)

10. Pradhan Mantri Viksit Bharat Rozgar Yojana

10. With reference to the Pradhan Mantri Viksit Bharat Rozgar Yojana, consider the following statements:

1. It aims to catalyse employment generation across all sectors, especially manufacturing.
2. It provides an incentive up to ₹15,000 paid through Direct Benefit Transfer (DBT) using Aadhaar Bridge Payment System (ABPS).

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: PM Modi makes strong pitch for self-reliance

- Prime Minister Modi unveiled the PM-VBRY during his Independence Day address from the Red Fort. It carries a financial outlay of ₹99,446 crore (~₹1 lakh crore) and is set to run from 1 August 2025 to 31 July 2027, aiming to generate ~3.5 crore new jobs

Objectives & Outcomes

- **Job Creation:** Catalyze employment generation across all sectors, especially manufacturing. **Hence statement 1 is correct.**
- **Youth Empowerment:** Support youth joining the formal workforce for the first time.
- **Workforce Formalization:** Expand social security coverage via EPFO, aiding workforce formalization.

Key Features of the Scheme

Part A – Support to First-Time Employees

- **Target Group:** First-time employees registered with EPFO.
- **Salary Cap:** Eligible if earning up to ₹1 lakh/month.
- **Incentive:** Up to ₹15,000, equivalent to 1 month's EPF wage. Paid through Direct Benefit Transfer (DBT) using Aadhaar Bridge Payment System (ABPS). **Hence statement 2 is correct.**

Paid in 2 instalments:

- 1st instalment: After 6 months of continuous service.
- 2nd instalment: After 12 months, plus completion of a financial literacy programme.

- Savings Component: Part of the incentive will be deposited in a savings/deposit instrument, withdrawable later.
- Target Reach: Expected to benefit ~1.92 crore first-time employees.

Part B - Incentives for Employers

- Target Group: Employers hiring additional employees with salaries up to ₹1 lakh.
- Incentive: Up to ₹3,000/month per new employee. Payments transferred to PAN-linked bank accounts.
- Duration: 2 years for all sectors. Extended to 4 years for the manufacturing sector.
- Condition: New hires must be retained for at least 6 months.
- Impact: Expected to support creation of ~2.60 crore new jobs.

PYQ REFERENCE:

Q. With reference to the Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Yojana, consider the following statements:

1. The entry age group for enrolment in the scheme is 21 to 40 years.
2. Age specific contribution shall be made by the beneficiary.
3. Each subscriber under the scheme shall receive a minimum pension of 3,000 per month after attaining the age of 60 years.
4. Family pension is applicable to the spouse and unmarried daughters.

Which of the statements given above is/are correct?

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

Source:

<https://www.thehindu.com/news/national/pm-modi-i-day-speech-self-reliance-is-not-limited-to-import-export-but-linked-to-our-own-strengths-and-capabilities/article69935906.ece>

11. GST (Goods and Services Tax)

11. Consider the following statements:

1. GST is a comprehensive direct tax levied on the supply of goods and services in India.
2. GST is collected at the place of production, not consumption.
3. GST Council is chaired by the Union Finance Minister

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

Answer: (b) 3 only

Explanation:

In NEWS: Major GST shake-up: 12% and 28% slabs to be axed

- The government is planning to reduce the current four-tier structure (5%, 12%, 18%, 28%) to just two main rates:
 - 5% for essential and commonly used items
 - 18% for most other goods and services
- A special 40% rate is being considered for luxury and "sin" goods (e.g., tobacco, alcohol).

GST (Goods and Services Tax):

- GST (Goods and Services Tax) is a comprehensive **indirect tax** levied on the supply of goods and services in India. **Hence statement 1 is incorrect.**
- It was implemented on July 1, 2017, to replace a complex system of multiple indirect taxes levied by the central and state governments.

Key Features of GST

1. One Nation, One Tax
 - Unified tax system across the country.
 - Replaces taxes like VAT, Service Tax, Excise, CST, etc.
2. Destination-Based Tax
 - Tax is collected at the place of consumption, not production. **Hence statement 2 is incorrect.**
3. Multi-Tier Structure (as of 2025, pending simplification):
 - Current slabs: 5%, 12%, 18%, 28%
 - Special rate (0%) for essential items (e.g., food grains)
 - Compensation Cess for luxury and sin goods (e.g., tobacco, aerated drinks)
4. Types of GST:
 - CGST Central Govt On intra-state supply
 - SGST State Govt On intra-state supply
 - IGST Central Govt On inter-state or international supply
5. Input Tax Credit (ITC)
 - Businesses can claim credit for the tax paid on purchases, reducing overall tax liability.
6. GST Council
 - The governing body chaired by the Union Finance Minister, includes state finance ministers. **Hence statement 3 is correct.**
 - Makes decisions on GST rates, policies, and exemptions.

PYQ REFERENCE:

Q. What is/are the most likely advantages of implementing 'Goods and Services Tax (GST)'?

1. It will replace multiple taxes collected by multiple authorities and will thus create a single market in India.
2. It will drastically reduce the 'Current Account Deficit' of India and will enable it to increase its foreign exchange reserves.
3. It will enormously increase the growth and size of the economy of India and will enable it to overtake China in the near future.

Select the correct answer using the code given below:

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

Source:

<https://www.thehindu.com/business/Economy/centre-proposes-fewer-gst-rates-only-5-18-to-remain-tax-on-common-use-items-slashed/article69937407.ece#:~:text=This%20would%20entail%20entirely%20doing, and%20above%20the%20GST%20rates.>

12. Diamond Industry in India

12. With reference to the diamond industry in India, which among the following statements are correct?

1. India accounts for 90–95% of the world's cut and polished diamonds by volume.
2. India is also producing the lab-grown diamond.
3. Golconda in Madhya Pradesh is the only active diamond mine in India operated by the National Mineral Development Corporation (NMDC).

Select the correct answer using the code given below:

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

Answer: (a) 1 and 2 only

Explanation:

In NEWS: U.S. has no alternative to India in diamonds, say industry leaders

Diamond Industry in India:

- India is one of the world's leading centres for diamond cutting and polishing, though it has limited reserves of natural diamonds.

- The country imports rough diamonds, processes them, and exports polished diamonds, making it a hub for diamond processing rather than production.
- India accounts for:
 - 90–95% of the world's cut and polished diamonds (by volume). **Hence statement 1 is correct.**
 - About 60–70% by value.
 - Diamond and gem exports contribute significantly to India's merchandise exports (approx. 7–10%).

Diamond Mining in India

- **Panna Mines (MP)** – the only active diamond mine in India operated by the National Mineral Development Corporation (NMDC). **Hence statement 3 is incorrect.**
- **Majhgawan & Hinota** – other smaller reserves.
- **Golconda (Telangana)** – historically famous diamond source (now defunct), known for famous diamonds like Kohinoor, Hope, and Darya-i-Noor.

Import & Export Dynamics

- **Imports:** Rough diamonds from Russia, Botswana, Canada, Australia, etc.
- **Exports:** Cut and polished diamonds to USA, Hong Kong, UAE, Belgium, etc.
- **GJEPC** (Gem and Jewellery Export Promotion Council): Nodal body promoting exports.

Government Initiatives & Policies

- **SEZs:** Special Economic Zones for gem and jewellery sector.
- **Bharat Diamond Bourse:** World's largest diamond exchange (Mumbai).
- **PLI Scheme:** Under consideration for promoting gems and jewellery sector.
- Simplification of Customs Procedures for diamond traders.
- Gold Monetisation and Bullion Exchange also indirectly support diamond trade infrastructure.
- **Synthetic/Lab-Grown Diamonds:** India is rising rapidly in lab-grown diamond production, especially in Surat. **Hence statement 2 is correct.**

PYQ REFERENCE:

Q. Consider the following pairs:

Country	Resource-rich in
I. Botswana	Diamond
II. Chile	Lithium
III. Indonesia	Nickel

In how many of the above rows is the given information correctly matched?

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

Source: <https://www.thehindu.com/business/us-has-no-alternative-to-india-in-diamonds-say-industry-leaders/article69932206.ece>

13. The Employees Provident Fund Organisation (EPFO)

13. How many of the following are managed by the Employees Provident Fund Organisation (EPFO):

- I. The Employees' Provident Fund (EPF)
- II. The Employees' Pension Scheme (EPS)
- III. The Employees' Deposit-Linked Insurance (EDLI)

Select the correct answer using the code given below.

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

Answer: (a) I, II and III

Explanation:

In NEWS: At 21.89 lakh, EPFO records highest net addition in June

Key Highlights of EPFO – June 2025:

- EPFO added 21.89 lakh net members in June 2025 – highest since April 2018.
- New subscribers: 10.62 lakh (↑12.68% from May).
- Rejoined members: 16.93 lakh (↑15.09% from May, ↑19.65% YoY).
- 18–25 age group made up 60.22% of new subscribers (6.39 lakh).
- Women subscribers: 3.02 lakh new, 4.72 lakh net additions.
- Top state: Maharashtra (20.03% of total additions).
- Most jobs came from the services sector.

The Employees Provident Fund Organisation (EPFO):

- The EPFO was set up under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**, and began operations fully by November 1, 1952.
- It functions under India's **Ministry of Labour and Employment**, with oversight by the statutory Central Board of Trustees (CBT).
- EPFO's operations are administered via a nationwide network—22 zonal offices, 150 regional offices, 113 district offices, plus several special offices and service centers.
- EPFO is one of India's two principal social security agencies (the other being Employees' State Insurance).
- EPFO manages:
 - The Employees' Provident Fund (EPF)—a mandatory defined-contribution retirement savings scheme,

- The Employees' Pension Scheme (EPS), and
- The Employees' Deposit-Linked Insurance (EDLI).

Hence option (a) is correct.

- Employees contribute 12% of basic wages toward EPF.
- Employers contribute 12%—of which 3.67% goes to EPF and 8.33% to EPS, alongside 0.5% each for administrative charges and EDLI.
- A 12-digit transferable account number assigned to each EPF member for greater portability and ease.
- It consolidates multiple Member IDs under one umbrella, simplifying claims, transfers, and online access (such as passbooks, SMS alerts, KYC updates).
- EPFO manages social security arrangements with foreign countries—currently, 19 bilateral agreements are in place.

PYQ REFERENCE:

Q. With reference to casual workers employed in India, consider the following statements:

1. All casual workers are entitled for Employees Provident Fund coverage.
2. All casual workers are entitled for regular working hours and overtime payment.
3. The government can by a notification specify that an establishment or industry shall pay wages only through its bank account.

Which of the above statements are correct?

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

Source:

<https://www.thehindu.com/news/national/at-2189-lakh-epfo-records-highest-net-addition-in-june/article69956853.ece>

14. SEMICON India 2025

14. Consider the following statements:

1. SEMICON India 2025 is wholly organised by India under the India Semiconductor Mission (ISM).
2. The India Semiconductor Mission (ISM) is an independent institution under the Ministry of Commerce and Industry.

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: Prime Minister Narendra Modi to inaugurate fourth edition of SEMICON India 2025

About SEMICON India

- SEMICON India 2025 is being jointly organised by India Semiconductor Mission (ISM) and SEMI. **Hence statement 1 is incorrect.**
- SEMICON India is one of eight annual SEMICON expositions worldwide hosted by SEMI that bring together executives and leading experts in the global semiconductor design and manufacturing ecosystem.
- The upcoming event marks the beginning of an exciting journey into the future of technological innovation, fostering collaboration and sustainability in the global semiconductor ecosystem.

About SEMI

- SEMI is the global industry association connecting over 3,000 member companies and 1.5 million professionals worldwide across the semiconductor and electronics design and manufacturing supply chain.
- They accelerate member collaboration on solutions to top industry challenges through Advocacy, Workforce Development, Sustainability, Supply Chain Management and other programs.

About ISM

- The India Semiconductor Mission (ISM) is an independent institution under the Ministry of Electronics and Information Technology (MeitY), Government of India. **Hence statement 2 is incorrect.**
- It is the nodal agency for the Semicon India Programme to develop a sustainable and globally competitive semiconductor and display manufacturing ecosystem in India.
- ISM is responsible for evaluating proposals, facilitating technology partnerships, coordinating with central and state governments, and managing fiscal incentive disbursements.
- The mission's core objective is to establish India as a trusted global hub for semiconductor and electronics manufacturing, ensuring economic security and technological self-reliance.

PYQ REFERENCE:

Q. Atal Innovation Mission is set up under the

- (a) Department of Science and Technology
- (b) Ministry of Labour and Employment
- (c) NITI Aayog**
- (d) Ministry of Skill Development and Entrepreneurship

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2159939>

15. The Central Board of Direct Taxes (CBDT)

15. With reference to the Central Board of Direct Taxes (CBDT), which of the following statements are correct?

1. CBDT is a statutory authority under the Central Board of Revenue Act, 1963.
2. It functions under the Department of Revenue, Ministry of Finance.
3. It supervises and controls the Income Tax Department.

Select the correct answer using the code given below:

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: CBDT working on SOP to handle seized digital data: Official

The Central Board of Direct Taxes (CBDT):

- CBDT is a statutory authority under the Central Board of Revenue Act, 1963. **Hence statement 1 is correct.**
- It functions under the Department of Revenue, Ministry of Finance. **Hence statement 2 is correct.**
- The earlier Central Board of Revenue was split into CBDT (Direct Taxes) and CBIC Indirect Taxes & Customs).
- CBDT is headed by a Chairman with six Members, each handling specific areas.
- It frames policies for direct taxes like Income Tax, Corporate Tax, etc.
- It supervises and controls the Income Tax Department. **Hence statement 3 is correct.**
- It enforces the Income-tax Act, 1961 and other tax-related laws.
- It investigates tax evasion, black money, and benami transactions.
- It manages international tax cooperation, treaties, and DTAA's.
- It is responsible for digitalization of tax systems (e-filing, faceless assessment).
- It provides revenue-related inputs for the Union Budget.
- It launched reforms like Faceless Assessment, Vivad se Vishwas Scheme, and Taxpayer Charter.

- CBDT plays a crucial role in fiscal policy and revenue mobilization.
- Major challenges include widening the tax base, tackling evasion, and taxing the digital economy.

PYQ REFERENCE:

Q. With reference to the 'Banks Board Bureau (BBB)', which of the following statements are correct?

1. The Governor of RBI is the Chairman of BBB.
2. BBB recommends for the selection of heads for Public Sector Banks.
3. BBB helps the Public Sector Banks in developing strategies and capital raising plans.

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.thehindu.com/business/working-on-procedures-for-what-happens-with-seized-digital-data-cbdt-official/article69975000.ece#:~:text=The%20Central%20Board%20of%20Direct,senior%20official%20in%20the%20CBDT.>

16. Cotton production in India

16. Consider, the following statements:

Statement-I: India is the largest producer of cotton in the world

Statement-II: India has the largest area under cotton cultivation globally, covering about 38% of the world's cotton-growing area.

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

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

Answer: (d) Statement-I is incorrect but Statement-II is correct

Explanation:

In NEWS: Why has the import duty on cotton been suspended?

Cotton Production in India:

- India is the **second-largest** producer of cotton in the world (**after China**), contributing around 20–21% of global production. **Hence statement I is incorrect.**
- India has the largest area under cotton cultivation globally, covering about 38% of the world's cotton-growing area. **Hence statement II is correct.**
- Cotton production in India has declined from 386 lakh bales in 2014–15 to around 294 lakh bales in 2024–25.
- Yield per hectare has fallen from 500 kg in 2017–18 to 441 kg in 2023–24, much lower than global averages (China ~1950 kg/ha).
- The decline is attributed to pest resistance (pink bollworm), policy gaps, lack of new technologies, and high input costs.
- Despite production decline, India remains a leading exporter, but domestic textile industries face challenges due to MSP hikes and raw material shortages.
- According to OECD–FAO projections, India's cotton production is expected to grow at ~2% annually over the next decade, driven mainly by yield improvement rather than area expansion.
- India is projected to overtake China as the world's largest cotton producer by 2034, provided productivity challenges are addressed.
- The textile industry in India, one of the largest employers, is highly dependent on cotton, making fluctuations in production a matter of economic concern.
- The government has launched initiatives like Technology Mission on Cotton and increased MSP support, but challenges in implementation remain.

PYQ REFERENCE:

Q. Consider, the following statements:

Statement-I: India accounts for 3.2% of global export of goods.

Statement-II: Many local companies and some foreign companies operating in India have taken advantage of India's 'Production-linked Incentive' scheme.

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: THE HINDU

<https://www.pressreader.com/india/the-hindu-thiruvananthapuram-9WWe/20250827/282338275984176>



INTERNATIONAL RELATIONS

1. India-UN Global Capacity Building Initiative

1. Consider the following statements:

1. Rice Fortification and Supply Chain Management
2. Digital Health Platform
3. Census Preparedness
4. Vocational Training Programme

Which of the above mentioned projects are part of India-UN Global Capacity Building Initiative?

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

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

Explanation:

In NEWS: India recently launched the first four projects under the India-UN Global Capacity Building Initiative.

India-UN Global Capacity Building Initiative:

- The programme aims to help Global South countries achieve Sustainable Development Goals (SDGs).

Purpose & Design

This initiative leverages India's development expertise to support countries in the Global South through:

- Sharing India's best practices and institutional models, especially in areas like digital infrastructure, health, food systems, vocational training, and statistical preparedness
- Using the Indian Technical & Economic Cooperation (ITEC) programme to provide specialized training, continuing a flagship capacity-building mechanism involving over 12,000 slots per year for nearly 160 countries, with more than 225,000 trained so far
- The UN India SDG Country Fund, supported by the Bill & Melinda Gates Foundation, provides competitive grants (~USD 150,000 each) to selected proposals for pilot programmes, knowledge exchanges, and training components

First Phase Projects (Countries & Agencies)

A total of four flagship projects across nine partner countries were selected. Implementation is led by UN agencies in cooperation with Indian institutions:

- Rice Fortification and Supply Chain Management in Nepal with support of World Food Programme;
- Digital Health Platform for Zambia and Lao PDR with support of UNDP;

- Census Preparedness in Belize, Barbados, St Kitts & Navies, Suriname and Trinidad & Tobago with support of UN Population Fund; and
- Vocational Training Programme for South Sudan with support of UNESCO.

Hence all are correct.

Source: https://www.mea.gov.in/press-releases.htm?dtl/39933/Launch_of_Projects_under_India_UN_Global_Capacity_Building_Initiative#:~:text=The%20India%20UN%20Global%20South%20Capacity%20Building%20is,make%20positive%20impact%20towards%20achieving%20of%20the%20SDGs.

2. BIMSTEC

2. Consider the following statements:

Statement-I: The first-ever BIMSTEC Traditional Music Festival, titled 'SaptaSur: Seven Nations, One Melody' was held at New Delhi.

Statement-II: Promoting cultural exchange by strengthening people-to-people connections through arts, sports, and cultural programs is one of the key objectives of BIMSTEC.

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: 1st-ever BIMSTEC Traditional Music Festival to be held in New Delhi today

BIMSTEC Traditional Music Festival:

- The first-ever BIMSTEC Traditional Music Festival, titled 'SaptaSur: Seven Nations, One Melody', is a groundbreaking event that will showcase the rich and diverse musical traditions of the BIMSTEC countries.
 - **BIMSTEC countries:** India, Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka, and Thailand.
- It will take place at Bharat Mandapam in New Delhi.

- It marks an important cultural milestone in the region's cooperation.
- The festival is organized by the Indian Council for Cultural Relations (ICCR) and aims to celebrate the distinct musical traditions of the seven BIMSTEC countries, strengthening the cultural ties among these nations.

Hence statement I is correct.

BIMSTEC - Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation:

History & Evolution

- 1997: Formed as BIST-EC (Bangladesh, India, Sri Lanka, Thailand – Economic Cooperation).
- Later renamed BIMST-EC with Myanmar joining in 1997.
- Renamed BIMSTEC in 2004 after full membership of all 7 current nations.

Objectives

- Foster regional and economic cooperation.
- Bridge South Asia and Southeast Asia.
- Promote sustainable development, connectivity, trade, and security.
- Enhance people-to-people and institutional linkages.

Key Focus Areas

- **Connectivity:** Includes the BIMSTEC Master Plan for Transport Connectivity (adopted in 2022).
- **Trade Integration:** Negotiating the BIMSTEC Free Trade Area (FTA) Agreement.
- **Energy Cooperation:** Development of a BIMSTEC Grid Interconnection.
- **Security:** Cooperation on counter-terrorism, cybersecurity, maritime security.
- **Climate Change & Disaster Management.**
- **Tourism & Cultural Exchange:** Boosting tourism, cross-border movement, and cultural exchanges among the countries. Strengthening people-to-people connections through arts, sports, and cultural programs. **Hence Statement-II is correct and Statement-II is the correct explanation for Statement-I**

PYQ REFERENCE:

Q. Consider the following statements in respect of BIMSTEC:

- I. It is a regional organization consisting of seven member States till January 2025.
- II. It came into existence with the signing of the Dhaka Declaration, 1999.
- III. Bangladesh, India, Sri Lanka, Thailand and Nepal are founding member States of BIMSTEC.
- IV. In BIMSTEC, the subsector of 'tourism' is being led by India.

Which of the statements given above is/are correct?

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

Source: <https://www.newsonair.gov.in/1st-ever-bimstec-traditional-music-festival-to-be-held-in-new-delhi-today/#:~:text=The%20first%20Dever%20BIMSTEC%20Traditional,perform%20at%20the%20musical%20evening.>

3. India - Philippines

3. Which of the following statements are correct with respect to India - Philippines relations:

1. Diplomatic relations between India and the Philippines were established in 1949.
2. The Philippines offers visa-free access to Indian tourists.
3. Both India and the Philippines participate in the MILAN exercise.

Select the answer using the code given below:

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

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: India-Philippines relations elevated to level of strategic partnership, says PM Modi

India - Philippines relationship:

- Diplomatic relations between India and the Philippines were established in **1949**.
- India maintains an embassy in Manila, whilst the Philippines maintains one in New Delhi.
- **A treaty of friendship** was signed between the Philippines and India on 11 July 1952, while a strategic partnership between the two countries was established on 5 August 2025.

Major Outcomes & Areas of Cooperation:

1. Political Cooperation

- Regular high-level visits and dialogue through existing mechanisms (e.g., JCBC, Policy Talks).

2. Defence, Security & Maritime Cooperation

- Institutionalizing tri-service military training and cooperation.

- Enhanced maritime security, including:

- Maritime Domain Awareness (MDA)
- Coast Guard cooperation
- ASEAN-India Maritime Exercise, MILAN

3. Trade, Investment & Economic Cooperation

- Enhanced cooperation in:

- Renewable energy, critical minerals, EVs, AI, robotics
- Healthcare, pharma, startups, shipbuilding, ICT, steel

4. Consular & Legal Cooperation

- India grants gratis e-tourist visa to Filipino citizens.
- Philippines offers visa-free access to Indian tourists.

5. Culture, Tourism & People-to-People Ties

- Expanded Cultural Exchange Programme.
- Boost to student, media, think tank, and academic exchanges.
- Strengthening cooperation through ICCR, ITEC, and joint tourism initiatives.

6. Multilateral & Regional Cooperation

- Shared commitment to a rules-based **Indo-Pacific & UNCLOS** (1982).
- Deepening engagement in the **Voice of the Global South Summit (VOGSS)**.
- Support for UN Security Council reforms and global climate action platforms like:
 - International Solar Alliance (ISA)
 - Coalition for Disaster Resilient Infrastructure (CDRI)
 - Global Biofuels Alliance (GBA)
 - Mission LiFE (Lifestyle for Environment)

Source:

<https://www.thehindu.com/news/national/prime-minister-narendra-modi-meets-philippines-president-ferdinand-r-marcos-jr/article69896633.ece>

4. North Atlantic Treaty Organization (NATO)

4. Consider the following statements:

I. The North Atlantic Treaty Organization (NATO) was established with the signing of the North Atlantic Treaty in 1949.

II. The North Atlantic Council (NAC) is the main decision-making body where each member has one vote.

III. As of July 2025, Ukraine is the latest NATO member.

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: NATO has begun coordinating regular large weapons shipments to Ukraine, focusing on battlefield priorities.

North Atlantic Treaty Organization (NATO):

- The North Atlantic Treaty Organization, also called the North Atlantic Alliance, is an intergovernmental military alliance between **32 member states** - 30 in Europe and 2 in North America.

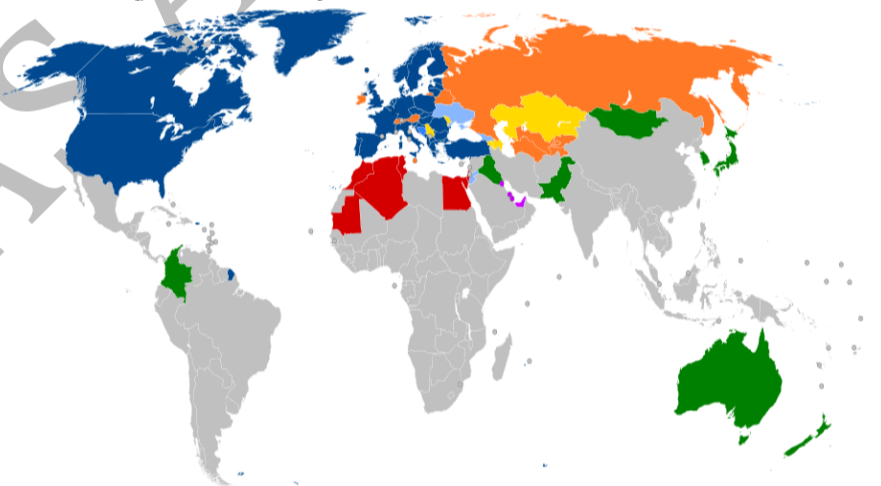
- Founded in the aftermath of World War II, NATO was established with the signing of the **North Atlantic Treaty in 1949**.

- It is headquartered in **Brussels, Belgium**.

- It was found to provide collective defense against armed attack, particularly in the context of the Cold War and the threat posed by the Soviet Union.

- the most recent members:

- Finland (joined 2023)
- Sweden (joined 2024)



Political Structure:

- North Atlantic Council (NAC) – Main decision-making body; each member has one vote.
- Secretary General – Head of NATO (as of 2025: Jens Stoltenberg's successor TBD).
- Decisions are **made by consensus**, not majority vote.

Article 5 of the NATO Treaty states:

"An armed attack against one or more of them in Europe or North America shall be considered an attack against them all."

Military Operations

- NATO has led or participated in many major operations:
 - Bosnia and Herzegovina (1990s) – Peacekeeping
 - Kosovo (1999–present) – KFOR mission
 - Afghanistan (2003–2021) – ISAF, later Resolute Support
 - Libya (2011) – Air campaign to protect civilians
 - Iraq (present) – Training missions

NATO's Role in Ukraine:

- **Ukraine is not a member of NATO**, but it is a partner country.
- Since Russia's full-scale invasion in 2022, NATO has:
 - Increased military aid coordination (though aid is provided by individual member states).
 - Strengthened eastern flank defenses.
 - Enhanced training and intelligence support to Ukraine.
 - Now, as of August 2025, NATO is coordinating large-scale, regular arms deliveries based on Ukraine's battlefield needs.

PYQ REFERENCE:

Q. Consider the following countries:

- Austria
- Bulgaria
- Croatia
- Serbia
- Sweden
- North Macedonia

How many of the above are members of the North Atlantic Treaty Organization?

- Only three
- Only four**
- Only five
- All the six

Source: <https://www.hindustantimes.com/world-news/us-sells-1-billion-in-arms-to-europe-for-ukraine-sealing-shift-in-approach-101754412729667.html>

5. Chenab Bridge

5. The world's highest railway arch bridge located between Kauri and Bakkal rail stations is built across which among the following rivers?

- Brahmaputra
- Jhelum
- Yamuna
- Chenab**

Answer: (d) Chenab

Explanation:

In NEWS: Operation Sindoor and Chenab Bridge to feature on Independence Day invites

- For the first time, the traditional image of the Central Vista on invitation cards is being replaced by a sketch of the Chenab Rail Bridge — the world's highest railway arch bridge

The Chenab Rail Bridge:

- The Chenab Rail Bridge is a **steel-and-concrete deck-arch railway bridge** spanning the Chenab River in the Reasi district, Jammu & Kashmir, India.
- Officially opened to rail traffic on 6 June 2025 by Prime Minister Narendra Modi, cementing rail connectivity to the Kashmir Valley for the first time.
- It is a steel and concrete bridge spanning 1,315 m (4,314 ft) across the river gorge.
- It is located between **Kauri and Bakkal rail stations** on the Jammu–Baramulla line.



Significance of the Chenab Rail Bridge:

- **A global engineering benchmark: the world's highest railway arch bridge** and a symbol of innovation in extreme terrain
- **Strategic integration:** landslide-proof and blast-resistant, built for both civilian and potential defense utility
- **Social uplift:** transforms connectivity and economic potential for remote Himalayan communities

Chenab river:

- The Chenab River originates from the **confluence of the Chandra and Bhaga rivers** in the Lahaul and Spiti district of Himachal Pradesh, India.
- It flows through the Jammu and Kashmir region before entering Pakistan, where it becomes one of the major rivers of Punjab.
- The Chenab is part of the Indus River system and eventually **merges with the Jhelum, Ravi, and then the Indus River.**
- Under the Indus Waters Treaty (1960), the Chenab is one of the western rivers allocated to Pakistan, but India

has the right to use its waters for non-consumptive purposes like hydropower generation.

- Major Indian hydropower projects on the Chenab include the **Baglihar Dam, Salal Dam, Dul Hasti, and Pakal Dul (under construction)**.

Source:

<https://www.thehindu.com/news/national/operation-sindoor-and-chenab-bridge-to-feature-on-independence-day-invites/article69894276.ece>

6. ASEAN

6. Consider the following statements:

Statement I: India, Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam are parties to AITIGA, a trade in Goods Agreement

Statement II: India is one of the member countries of ASEAN

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

- Both Statement I and Statement II are correct and Statement II explains Statement I
- Both Statement I and Statement II are correct but Statement II does not explain Statement I
- Statement I is correct but Statement II is not correct
- Statement I is not correct but Statement II is correct

Answer: (c) Statement I is correct but Statement II is not correct

Explanation:

In NEWS: Indian, ASEAN officials to begin fresh round of talks to review AITIGA

ASEAN-India Trade in Goods Agreement (AITIGA):

- Signed: 13 August 2009
- Came into Force: 1 January 2010
- Parties: India and the 10 ASEAN member states (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam). **Hence statement I is correct.**
- Nature: Part of the broader ASEAN-India Free Trade Area (AIFTA) framework, covering trade in goods; separate agreements handle services and investment.

Key Provisions

- **Tariff Liberalisation:** India and ASEAN committed to progressively reduce and eliminate tariffs on over 80% of traded goods by 2022 (with exceptions for sensitive items).

- **Rules of Origin (RoO):** Goods must meet a 40% regional value content and be wholly obtained or substantially transformed in ASEAN/India to qualify for preferential tariffs.
- **Exclusion Lists:** Sensitive sectors (e.g., agriculture, textiles, automobiles) allowed higher tariffs or exclusions to protect domestic industries.
- **Customs Cooperation:** Measures to simplify and harmonise customs procedures to facilitate trade.
- **Safeguard Measures:** Allows temporary protective duties if imports surge and harm domestic industries.

ASEAN:

- ASEAN stands for the Association of Southeast Asian Nations, a regional intergovernmental organization formed to promote political, economic, security, and socio-cultural cooperation among Southeast Asian countries.
- It was established on 8 August 1967 (Bangkok Declaration)
- Founding Members: Indonesia, Malaysia, Philippines, Singapore, Thailand
- Presently, there are 10 members. India is not a member. **Hence statement II is incorrect.**
- Headquarters: Jakarta, Indonesia
- Motto: One Vision, One Identity, One Community
- Official Languages: English



Objectives

- Promote regional peace and stability.
- Accelerate economic growth, social progress, and cultural development.
- Foster mutual assistance and collaboration.
- Maintain political stability and resist external interference.

Key Agreements & Initiatives

- ASEAN Free Trade Area (AFTA) – promotes trade liberalization among members.
- ASEAN-India Trade in Goods Agreement (AITIGA) – governs trade between ASEAN and India (currently under review due to India's trade deficit concerns).

- Regional Comprehensive Economic Partnership (RCEP) – ASEAN-led trade pact with partners like China, Japan, Korea, Australia, and New Zealand (India opted out in 2019).

Significance for India

- Strategic: ASEAN sits at the crossroads of major sea lanes (Malacca Strait), crucial for India's maritime security.
- Economic: ASEAN is one of India's largest trading partners (~\$123 billion trade in 2022–23).
- Diplomatic: India is part of the ASEAN-India Summit and the East Asia Summit.
- Cultural: Shared Buddhist and Hindu heritage with countries like Myanmar, Thailand, and Cambodia.

PYQ REFERENCE:

Q. With reference to Asian Infrastructure Investment Bank (AIIB), consider the following statements:

1. AIIB has more than 80 member nations.
2. India is the largest shareholder in AIIB.
3. AIIB does not have any members from outside Asia.

Which of the statements given above is/are correct?

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

Source: <https://www.thehindu.com/business/next-round-of-india-asean-trade-agreement-review-talks-in-feb/article68903318.ece>

7. UN Conference on Landlocked Developing Countries

7. Consider the following statements:

Statement-I: The Third United Nations Conference on Landlocked Developing Countries was held in Awaza, Turkmenistan.

Statement-II: The conference focused on the adoption of the Almaty Programme of Action for LLDCs.

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

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

Answer: (c) Statement-I is correct but Statement-II is incorrect

Explanation:

In NEWS: The Third United Nations Conference on Landlocked Developing (LLDC3) opened in Awaza, Turkmenistan **Hence Statement-I is correct**

- The conference was indeed held in Awaza, Turkmenistan, but it adopted the Awaza Programme of Action (2024–2034), not the Almaty Programme of Action, which was adopted earlier in 2003. **Hence Statement-II is incorrect**

About UN Conference on Landlocked Developing Countries

- The LLDC3 conference, held once every ten years, brings global attention to the 32 landlocked developing countries, which collectively house over 600 million people.
- The primary objective of LLDC3 is to facilitate coordinated international efforts to bridge these development gaps.
- The conference will explore actionable solutions through partnerships, smarter investment frameworks, and the development of efficient, flexible transport corridors that enhance the movement of goods and services across regions.
- Due to lack of direct access to seaports, landlocked countries face disproportionate barriers to trade, economic diversification, and infrastructure development.
- This year's conference, themed "Driving Progress through Partnerships," serves as a crucial platform to address structural challenges, mobilize investment, and implement the newly adopted Awaza Programme of Action (2024–2034).

PYQ REFERENCE:

Q. Consider the following statements:

Statement-I: Israel has established diplomatic relations with some Arab States.

Statement-II: The 'Arab Peace Initiative' mediated by Saudi Arabia was signed by Israel and the Arab League.

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

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

Source:

<https://timesofindia.indiatimes.com/world/middle-east/uae-participates-in-3rd-un-conference-on-landlocked-developing-countries-in-turkmenistan/articleshow/123145261.cms>

8. The National Organ and Tissue Transplant Organisation (NOTTO)

8. With reference to the National Organ and Tissue Transplant Organisation (NOTTO), consider the following statements:

1. NOTTO is the apex organization for implementing the National Organ Transplant Program.
2. It operates under the Transplantation of Human Organs and Tissues Act (THOTA) of 1994.

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: Women, kin of deceased donors to get priority in organ transplant, says govt.

The National Organ and Tissue Transplant Organisation (NOTTO):

- The National Organ and Tissue Transplant Organisation (NOTTO) is a national-level organization under the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

Mandate and establishment

- NOTTO is the apex organization for implementing the National Organ Transplant Program (NOTP). **Hence statement 1 is correct.**
- It operates under the Transplantation of Human Organs and Tissues Act (THOTA) of 1994, which was amended in 2011 to include tissue donation and registration of tissue banks. **Hence statement 2 is correct.**

Key functions and responsibilities

- Coordination and networking: Serving as the apex center for all-India activities related to the procurement and distribution of organs and tissues.
- National Registry: Maintaining a national registry of organ and tissue donors and recipients.
- Policy and Guidelines: Laying down policy guidelines and protocols for various functions related to organ and tissue donation and transplantation.
- Awareness and Promotion: Raising awareness and promoting deceased organ donation and transplantation activities through campaigns, social media, and events.

- Training and Capacity Building: Coordinating and organizing training for various professionals involved in organ and tissue donation and transplantation.
- Monitoring and Data Collection: Monitoring transplantation activities in the regions and states and maintaining a data bank.
- Information Dissemination: Disseminating information to organizations, hospitals, and individuals regarding organ donation and transplantation.
- One Nation One Policy: Working with states to remove conditions like state domicile and upper age limits for registration to receive deceased donor organs, ensuring equitable access.
- Financial Support: Provides financial support for the establishment and strengthening of SOTTOs (State Organ and Tissue Transplant Organizations), Regional/State Biomaterial centers, Organ Transplant/retrieval facilities, and hiring transplant coordinators.

Organizational structure

- NOTTO operates through a three-tiered structure:
- National Organ and Tissue Transplant Organisation (NOTTO): The central apex body in New Delhi.
- Regional Organ and Tissue Transplant Organizations (ROTTOs): Regional centers that coordinate activities between state organizations.
- State Organ and Tissue Transplant Organizations (SOTTOs): State-level agencies responsible for coordination at the state level.

Key initiatives

- Aadhaar-Linked Pledge Portal: Enables citizens to register their pledges for organ and tissue donation after death through a dedicated portal.
- National Biomaterial Centre (National Tissue Bank): Addresses the need for tissue donation and registration of tissue banks across the country.
- Uniform Organ Transport Policy: Developed in collaboration with various ministries to facilitate efficient and timely organ transport across the country, including air, train, and surface transport.

Source:

<https://www.thehindu.com/news/national/women-kin-of-deceased-donors-to-get-priority-in-organ-transplant-says-govt/article69913672.ece>

9. Operation Sindoor

9. Operations undertaken as a precision military strike targeting nine terrorist-linked infrastructure sites across Pakistan and Pakistan-occupied Kashmir (PoK) in response to the Pahalgam terror attack is called:

- (a) Operation Sankalp
- (b) Operation Sindoor
- (c) Operation Sadbhavana
- (d) Operation Sindhu

Answer: (b) Operation Sindoor

Explanation:

In NEWS: 'Operation Sindoor is an example of humanity's battle against terrorism'

Operation Sindoor:

● Operation Sindoor was a precision military strike executed by the Indian Armed Forces on May 7, 2025, targeting nine terrorist-linked infrastructure sites across Pakistan and Pakistan-occupied Kashmir (PoK). This was in response to the Pahalgam terror attack on April 22, which claimed 26 civilian lives. **Hence option (b) is correct.**

- Date - 7 May 2025
- Purpose - Retaliation for the Pahalgam terror attack
- Targets - 9 terror-linked sites across Pakistan and PoK
- Armed Forces - Combined operation by IAF, Army, and Navy
- Weapons Used - SCALP missiles, HAMMER bombs, loitering munitions
- Strategic Aim - Precise targeting of terror infrastructure with no escalation
- Symbolism - Powerful cultural naming ("Sindoor") honoring victims
- Recognition - Multiple gallantry awards across military branches

PYQ REFERENCE:

Q. Operations undertaken by the Army towards the upliftment of the local population in remote areas to include addressing of their basic needs is called:

- (a) Operation Sankalp
- (b) Operation Maitri
- (c) Operation Sadbhavana**
- (d) Operation Madad

Source:

<https://www.thehindu.com/news/national/operation-sindoor-an-example-of-humanitys-fight-against-terrorism-president-murmu/article69934285.ece>

10. India-Singapore Relations

10. Consider the following statements with respect to India - Singapore relations:

1. India and Singapore are members in the Indian Ocean Rim Association (IORA)
2. Singapore has been a part of India's Comprehensive Economic Cooperation Agreement (CECA) since 2005.
3. A Joint Air Force Training between the two countries is held at at Kalaikunda air base, India
4. The Amaravati Capital City project in Andhra Pradesh had Singapore's involvement in early planning phases.

How many of the above statements are correct?

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

Answer: (d) All Four

Explanation:

In NEWS: India, Singapore agree to expand cooperation in key areas

India-Singapore Relations:

Historical & Cultural Ties:

- Deep-rooted connections date back to ancient maritime trade and cultural exchanges.
- Large Indian diaspora in Singapore (~9% of population), helping build people-to-people links.
- Shared colonial history under the British Empire.

Geopolitical Importance

- Singapore plays a key role in India's Act East Policy and Indo-Pacific vision.
- Both countries are part of forums like:
 - ASEAN Regional Forum (ARF)
 - East Asia Summit (EAS)
 - Indian Ocean Rim Association (IORA) **Hence statement 1 is correct.**
- Singapore supports a free, open, and inclusive Indo-Pacific, aligning with India's maritime strategy.
- Education, Tech, and People-to-People
- MoUs between universities and training institutes.
- Joint skilling programs.
- Singapore is a popular education destination for Indian students.

Strategic & Defence Cooperation

● Singapore is the only country with which all three Indian armed services (Army, Navy, Air Force) have bilateral exercises:

- SIMBEX (Naval)
- Bold Kurukshetra (Army)
- Joint Air Force Training at Kalaikunda air base, India

Hence statement 3 is correct.

- Defence Cooperation Agreement (DCA) signed in 2003, renewed and enhanced over time.
- Access to each other's military facilities, including air and maritime bases.

Economic & Trade Relations

● Singapore is one of India's largest FDI sources and a major destination for Indian investments.

● Part of the Comprehensive Economic Cooperation Agreement (CECA) since 2005. **Hence statement 2 is correct.**

● Singapore acts as a financial and trade gateway for India into Southeast Asia.

Areas of collaboration:

● Unified Payments Interface (UPI)–PayNow linkage for real-time cross-border transactions (launched in 2023).

● Regulatory and technological cooperation between RBI and Monetary Authority of Singapore (MAS).g., Smart Cities Mission)

● Tech collaboration in AI, blockchain, healthtech, and green technologies.

● Startup exchanges and investor meets.

● India's Smart Cities Mission has benefitted from Singapore's input in:

- Urban design and digital governance.
- Sustainable development models and urban transport.
- Capacity building for Indian city planners.
- Example: Amaravati Capital City project in Andhra Pradesh had Singapore's involvement in early planning phases. **Hence statement 4 is correct.**

Recent Developments (2025)

● India–Singapore Ministerial Roundtable (ISMR) held in August 2025:

● Ministers from both sides discussed cooperation in digitalisation, sustainability, connectivity, and manufacturing.

● Proposal for an undersea cable: to transmit solar power from India to Singapore—also usable for data transfer.

● Collaboration on semiconductors and India's growing tech ecosystem.

PYQ REFERENCE:

Q. Consider the following statements:

1. Vietnam has been one of the fastest growing economies in the world in the recent years.
2. Vietnam is led by a multi-party political system.
3. Vietnam's economic growth is linked to its integration with global supply chains and focus on exports.
4. For a long time Vietnam's low labour costs and stable exchange rates have attracted global manufacturers.
5. Vietnam has the most productive e-service sector in the Indo-Pacific region.

Which of the statements given above are correct?

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

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-key-india-singapore-agnipath-scheme-income-tax-2025-10188875/>

11. SLINEX

11. Consider the following statements with respect to SLINEX, Sri Lanka–India Naval Exercise:

1. INS Rana and INS Jyoti were the two participating Indian Naval ships in SLINEX.
2. The exercise is held in three phases, the air phase, the land phase and the sea phase.
3. Social, cultural & sports events and yoga sessions are also part of the exercise.

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: INDIAN NAVAL SHIPS IN SRI LANKA FOR SLINEX - 25

SLINEX:

SLINEX (Sri Lanka–India Naval Exercise) is a bilateral maritime exercise conducted between the Indian Navy and the Sri Lankan Navy

Participating Naval Ships

- IN Indian Navy
 - INS Rana – Guided Missile Destroyer

- INS Jyoti – Fleet Tanker **Hence statement 1 is correct.**
- LK Sri Lankan Navy
- SLNS Gajabahu – Advanced Offshore Patrol Vessel
- SLNS Vijayabahu – Advanced Offshore Patrol Vessel
- Special Forces from both navies will also participate.

Objectives of SLINEX:

- **Enhance Interoperability:** Joint planning and execution of complex maritime operations
- **Maritime Security Cooperation:** Joint response to threats such as piracy, trafficking, terrorism
- **Capacity Building:** Exchange of knowledge, technology, and training
- **Build Trust & Camaraderie:** Cultural exchanges, sporting events, and social interactions
- **Support Regional Stability:** In line with India's Security and Growth for All in the Region (SAGAR) and MAHASAGAR initiatives

Structure of the Exercise

- Harbour Phase: Held at a port (India or Sri Lanka)
- Activities include:
 - Subject Matter Expert Exchange (SMEE)
 - Planning conferences
 - Social, cultural & sports events
 - Yoga sessions **Hence statement 3 is correct.**
- Sea Phase: Held in the Indian Ocean
- Includes:
 - Tactical maneuvers
 - Gunnery drills
 - Navigation & communication exercises
 - Visit, Board, Search & Seizure (VBSS)
 - Replenishment at Sea (RAS) drills
- **Hence statement 2 is incorrect.**

Strategic Importance:

- Strengthens India-Sri Lanka maritime ties built over 20 years (since 2005)
- Reinforces regional maritime security and trust
- Supports India's maritime doctrine - MAHASAGAR – Mutual and Holistic Advancement for Security and Growth Across Regions

PYQ REFERENCE:

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

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

Select the answer using the code given below:

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2156920>

12. West Bank

12. West Bank is situated to the

- (a) East of Jordan river
- (b) East of Mediterranean sea
- (c) North of Lebanon
- (d) North of Syria

Answer: (b) East of Mediterranean sea

Explanation:

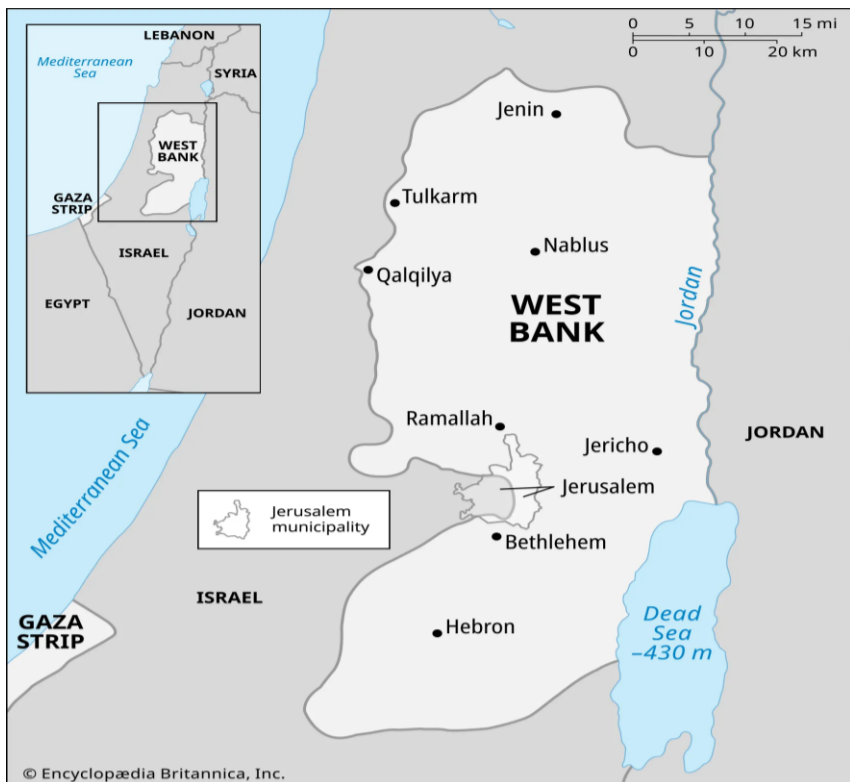
In NEWS: Record violence marks Israel's push towards West Bank annexation

West Bank:

- The West Bank is a landlocked territory in the Middle East, forming a significant part of the Israeli-Palestinian conflict.
- A disputed territory located between Israel and Jordan.
- It is west of the Jordan River
- It has been occupied by Israel since the 1967 Six-Day War.
- It is also claimed by Palestinians as part of their future state (along with Gaza).

Historical Background:

- Pre-1948: Part of British Mandate of Palestine.
- 1948-1967: Controlled by Jordan after the Arab-Israeli War.
- Post-1967: Occupied by Israel after Six-Day War.
- 1993 Oslo Accords: Established Areas A, B, and C for administrative purposes:
 - Area A: Palestinian Authority full control
 - Area B: Palestinian Authority civil + Israeli military
 - Area C: Israeli full control (over 60% of the West Bank)



Hence option (b) is correct.

Displacement in the West Bank:

- The UN Rights Office reports that since January, around 30,000 Palestinians—mostly in northern areas—have been forcibly displaced due to Israel's "Iron Wall" military operations in Jenin, Tulkarem, Nur Shams, and El Fara camps.
- Oxfam says over 40,000 Palestinians have been uprooted since the Gaza ceasefire on 19 Jan—marking the largest mass displacement in the West Bank since 1967.
- Military strikes have demolished homes, roads, infrastructure, and critical services, rendering large parts uninhabitable.

PYQ REFERENCE:

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.thehindu.com/data/record-violence-marks-israels-push-towards-west-bank-annexation/article69932377.ece>

13. India-Japan Relations

13. Consider the following statements:

- I. India is one of Japan's biggest FDI sources.
- II. JIMEX is the joint naval exercises between India and Japan.
- III. Both India and Japan are part of Quad grouping.

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

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

Answer: (d) I only

Explanation:

In NEWS: India-Japan ties — old partners, new priorities

India-Japan Relations:

1. Historical & Cultural Roots

- Buddhism: Spread from India to Japan in the 6th century; continues as a cultural bridge.
- World War II: Justice Radha Binod Pal was the only judge at the Tokyo Trials who dissented against convicting Japanese leaders—remembered respectfully in Japan.
- Post-independence: Japan provided early developmental aid to India; ties strengthened in trade and technology.

2. Diplomatic Framework

- 1952: Diplomatic relations established.
- 2000: "Global Partnership" launched.
- 2006: Upgraded to "Strategic and Global Partnership."
- 2014 onwards: "Special Strategic and Global Partnership" → close collaboration in political, economic, and security domains.

3. Economic Cooperation

- Investment: Japan is among India's biggest FDI sources. **Hence statement 1 is incorrect.**
- Flagship Project: Mumbai-Ahmedabad High-Speed Rail ("Bullet Train").
- Corridors: Delhi-Mumbai Industrial Corridor, Chennai-Bengaluru Industrial Corridor.
- Japan ODA: Largest bilateral donor to India.
- Trade: Bilateral trade around \$20B+ (2024), though below potential.

4. Strategic & Security Ties

- Defence Cooperation:
- Joint naval exercises (e.g., JIMEX). **Hence statement 2 is correct.**
- Participation in Malabar Exercise with the US and Australia.
- Agreements: Acquisition and Cross-Servicing Agreement (ACSA), intelligence sharing.
- Quad Partnership: Cooperation with US, Japan, Australia → Indo-Pacific strategy. **Hence statement 3 is correct.**
- Technology: Exploring co-development of defence equipment, AI, cybersecurity, space.

5. Multilateral & Regional Cooperation

- Free & Open Indo-Pacific (FOIP): Both promote rule-based maritime order.
- Supply Chain Resilience Initiative (SCRI): With Australia → reducing dependence on China.
- Clean Energy Partnership: Hydrogen, renewables, and energy transition.

6. Challenges

- Trade imbalance: Japan exports more to India than imports.
- China factor: Both share concerns but differ in approach.
- Slow implementation: Bullet train and corridor projects face delays.

7. Way Forward

- Deepen economic ties beyond infrastructure → digital economy, startups, semiconductors.
- Enhance defence co-production and joint research.
- Boost people-to-people ties → education, tourism, culture.
- Align more closely in Indo-Pacific security architecture.

Source: <https://www.thehindu.com/opinion/op-ed/india-japan-ties-old-partners-new-priorities/article69975928.ece>

14. Super Garuda Shield exercise 2025

14. With reference to the 'Super Garuda Shield exercise 2025', which among the following statements is/are correct?

1. Super Garuda Shield is an annual joint military exercise hosted by India and the Indonesia
2. The exercise aims to strengthen regional defense ties, enhance interoperability, and deter coercive actions in the Indo-Pacific.
3. It also includes participants from Australia, Japan, Singapore, UK, France, Canada, Germany, Netherlands, New Zealand, Brazil, and South Korea.

Select the answer using the code given below:

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

Answer: (d) 2 and 3

Explanation:

In NEWS: Indonesia launches annual U.S.-led military exercises with Indo-Pacific allies

Super Garuda Shield exercise 2025:

- Super Garuda Shield is an annual joint military exercise hosted by Indonesia and the US since 2009. **Hence statement 1 is incorrect.**
- The 2025 edition involves 6,500 troops and includes participants from Australia, Japan, Singapore, UK, France, Canada, Germany, Netherlands, New Zealand, Brazil, and South Korea. **Hence statement 3 is correct.**
- Several Asian countries also participated as observers.
- The exercise aims to strengthen regional defense ties, enhance interoperability, and deter coercive actions in the Indo-Pacific. **Hence statement 2 is correct.**
- The US described the expanded drills as a commitment to partnership, sovereignty, and collective deterrence.
- China criticized the drills, accusing the US of attempting to build an "Asian NATO" to counter its influence.
- Indonesia has raised concerns about Chinese encroachment into its Exclusive Economic Zone (EEZ) in the South China Sea.
- Despite security concerns, Indonesia maintains positive economic ties with China, given its trade and investment dependence.
- Indonesia follows a policy of dual-track diplomacy—defense diversification with the West while avoiding direct confrontation with China.
- The country continues to purchase US and French arms and develop interoperability with Western militaries.
- Experts argue that Indonesia's refusal to fully align with either the US or China is its strongest strategic asset in the Indo-Pacific.

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/145587/OPS/GRUEPHHQI.1+G8NEQIMNJ.1.html
<https://www.taipeitimes.com/News/front/archives/2025/08/26/2003842676#:~:text=Indonesia%20and%20the%20US%20yesterday%20began%20annual%20joint,allies%20to%20take%20threats%20from%20China%20more%20seriously.>

GEOGRAPHY & MAPS

1. Colorado River

1. Consider the following statements regarding Colorado river system:

1. Nearly all of the water in the Colorado River system comes from snow that falls in the Andes Mountains in the Upper Basin.
2. The construction of Hoover Dam and Glen Canyon Dam on the Colorado River has significantly altered its ecosystem.
3. The Colorado River Delta is facing ecological degradation primarily due to Reduced freshwater inflow due to upstream dams and diversions.

Which of the above statements is/are correct?

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

Answer: (b) 2 and 3 only

Explanation:

In NEWS: As the Colorado River slowly dries up, states angle for influence over future water rights

The Colorado River:

- The Colorado River originates in the **Rocky Mountains (not the Andes Mountains)**. The Andes are in South America, while the Colorado River is in North America.
- Nearly all of the water does come from snowmelt, but in the Rockies, particularly from the Upper Basin states like Colorado, Wyoming, and Utah. **Hence statement 1 is incorrect.**
- The construction of Hoover Dam and Glen Canyon Dam on the Colorado River has significantly altered its ecosystem. **Hence statement 2 is correct.**
- These dams have changed the natural flow of the river, affected sediment transport, altered habitats, and impacted fish and plant species downstream.
- Glen Canyon Dam, for example, has caused major ecological changes in the Grand Canyon stretch of the river.
- The Colorado River Delta is facing ecological degradation primarily due to reduced freshwater inflow due to upstream dams and diversions. **Hence statement 3 is correct.**
- The delta, located in Mexico, has suffered ecological damage because much of the river's water is diverted for agriculture and cities before it reaches the sea.
- This has led to habitat loss, reduced wetlands, and decreased biodiversity in the delta region.

PYQ REFERENCE:

Q. With reference to river Teesta, consider the following statements:

1. The source of river Teesta is the same as that of Brahmaputra but it flows through Sikkim.
2. River Rangeet originates in Sikkim and it is a tributary of river Teesta.
3. River Teesta flows into Bay of Bengal on the border of India and Bangladesh.

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.downtoearth.org.in/water/as-the-colorado-river-slowly-dries-up-states-angle-for-influence-over-future-water-rights>

2. Easter Island

2. Consider the following statements:

1. Easter Island is an island and special territory of Australia at the southeasternmost point of the Polynesian Triangle in Oceania.
2. It is one of the UNESCO's designated World Heritage Sites.
3. Easter Island is the only territory in Polynesia where Spanish is an official language.

How many of the above statements are correct?

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

Answer: (b) Only two

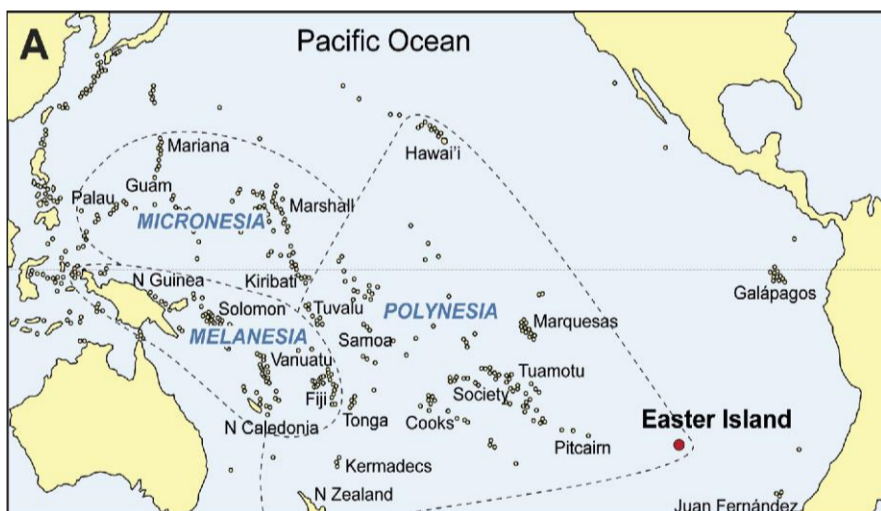
Explanation:

In NEWS: Moai: Sea level rise could drown iconic Easter Island statues by 2080, warns study



Easter Island:

- Easter Island is an island and special territory of **Chile** in the southeastern Pacific Ocean, at the southeasternmost point of the **Polynesian Triangle** in Oceania. **Hence statement 1 is incorrect.**
- The island is renowned for its nearly 1,000 extant monumental statues, called moai, which were created by the early Rapa Nui people.
- In 1995, UNESCO named Easter Island a World Heritage Site, with much of the island protected within Rapa Nui National Park. **Hence statement 2 is correct.**
- Easter Island is also the only territory in Polynesia where Spanish is an official language. **Hence statement 3 is correct.**



Source: <https://www.downtoearth.org.in/climate-change/moai-sea-level-rise-could-drown-iconic-easter-island-statues-by-2080-warns-study>
3. Southwest monsoon

3. Consider the following statements:

Statement I: The Southwest Monsoon is the seasonal wind system that brings the majority of India's annual rainfall between June and September.

Statement II: The Indian landmass heats up more rapidly than the surrounding oceans which creates a low-pressure area over the Indian subcontinent.

Statement III: In summer, the ITCZ shifts northwards towards the Tropic of Cancer which attracts moist trade winds from the southern hemisphere across the equator.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (a) Both Statement II and Statement III are correct and both of them explain Statement I

Explanation:

In NEWS: Southwest monsoon has extended in the past five decades: Study

Southwest Monsoon:

- The Southwest Monsoon is the seasonal wind system that brings the majority of India's annual rainfall between June and September. It is a key component of the Indian climate and the backbone of Indian agriculture. **Hence statement I is correct.**

Causes & Mechanism

Differential Heating:

- Landmass of the Indian subcontinent heats up faster than the surrounding seas during summer.
- This creates a low-pressure area over Northwest India and the Indo-Gangetic Plain. **Hence statement II is correct.**

Inter-Tropical Convergence Zone (ITCZ) Shift:

- The ITCZ shifts northwards towards the Tropic of Cancer in summer.
- This attracts moist trade winds from the southern hemisphere across the equator. **Hence statement III is correct.**

Coriolis Effect:

- Deflects the southeast trade winds to become southwesterly on crossing the equator.

Moisture Source:

- Winds pick up moisture from the Arabian Sea and Bay of Bengal, causing heavy rainfall.

Both Statement II and Statement III explains Statement I

Branches of Southwest Monsoon

Arabian Sea Branch

- Strikes the Western Ghats → Heavy rainfall in Kerala, Karnataka, Goa, Maharashtra.
- Causes orographic rainfall on windward side, dry conditions on leeward side (rain-shadow).

Bay of Bengal Branch

- Moves towards Northeast India → Heavy rainfall in Meghalaya, Assam, Arunachal Pradesh.
- Deflected by Himalayas towards northwest India.

Onset & Withdrawal

- Onset: Around 1st June in Kerala (declared by IMD based on rainfall, wind pattern, and OLR data).
- Progress: Covers most of India by mid-July.
- Withdrawal: Starts from Rajasthan in September, completes by mid-October.

Importance

- Supplies ~75% of India's annual rainfall.
- Vital for Kharif crops (paddy, maize, cotton, pulses).
- Recharges groundwater and reservoirs.

PYQ REFERENCE:

Q. Consider the following statements:

1. The duration of the monsoon decreases from southern India to northern India.
2. The amount of annual rainfall in the northern plains of India decreases from east to west.

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/climate-change/southwest-monsoon-has-extended-in-the-past-five-decades-study>

4. Plate tectonic movements

4. Consider the following statements regarding the plate tectonic movements:

1. Convergent boundaries create new crust like mid-ocean ridges.
2. Divergent boundaries lead to subduction, mountain building, or volcanic arcs.
3. Transform Boundaries cause earthquakes like the San Andreas Fault.

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

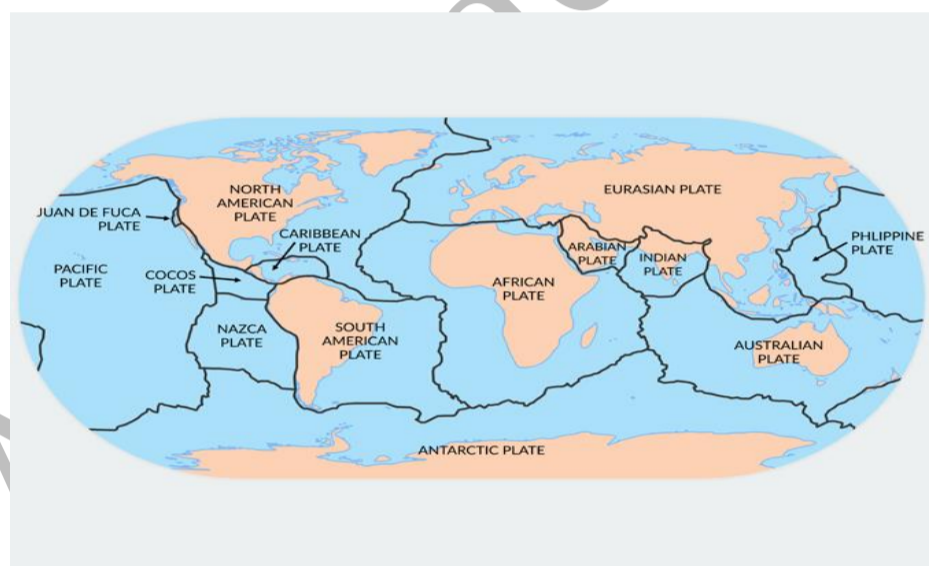
Answer: (c) 3 only

Explanation:

In NEWS: 1950 quake that broke mountains is a portend of things to come

Plate tectonic movements:

- Plate tectonics is the theory that Earth's lithosphere (outer shell) is divided into several plates that move and interact with each other.
- These plates move at varying speeds, typically between 1 and 6 inches per year.
- The movement is driven by convection currents in the Earth's mantle.
- These interactions, occurring at plate boundaries, can cause earthquakes, volcanic eruptions, and the formation of mountains.



Types of Plate Boundaries and Interactions:

Convergent Boundaries:

- Plates collide. This can lead to subduction (one plate slides under another), mountain building (like the Himalayas), or volcanic arcs. **Hence statement 1 is incorrect.**

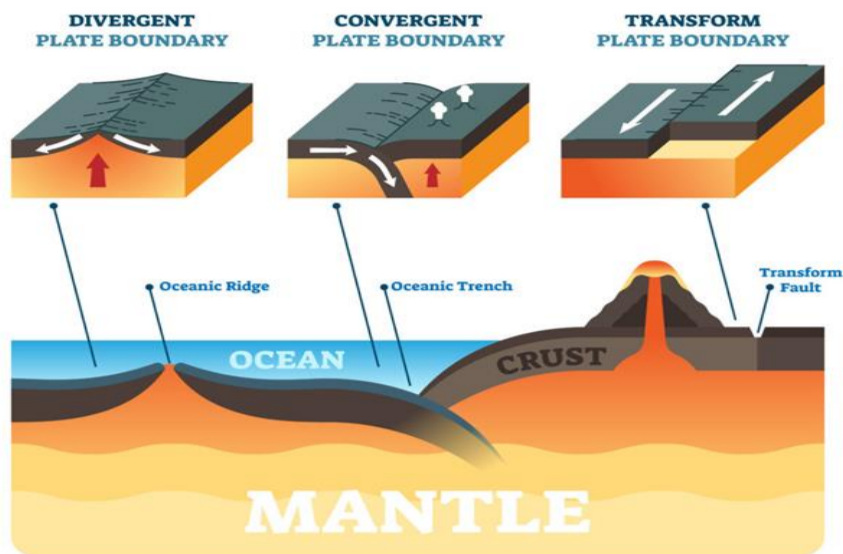
Divergent Boundaries:

- Plates move apart. Magma rises to fill the gap, creating new crust (like mid-ocean ridges). **Hence statement 2 is incorrect.**

Transform Boundaries:

- Plates slide past each other. This movement often causes earthquakes (like the San Andreas Fault). **Hence statement 3 is correct.**

PLATE BOUNDARIES



Causes of Plate Movement:

- Convection Currents: Heat from the Earth's core causes the mantle to circulate, dragging the plates along.
- Ridge Push: Gravity causes denser plates to slide down mid-ocean ridges.
- Slab Pull: The weight of a subducting plate pulls the rest of the plate along.

Effects of Plate Tectonics:

- Earthquakes and Volcanoes: These phenomena are concentrated at plate boundaries.
- Mountain Building: Collisions at convergent boundaries can create mountain ranges.
- Ocean Formation: Divergent boundaries create new oceanic crust and widen oceans.
- Continental Drift: The movement of plates over long periods has resulted in the current positions of continents.

Source: <https://www.thehindu.com/sci-tech/science/75-years-since-assam-quake-himalayas-prep-for-large-hydro-projects/article69927798.ece>

5. Salal Dam

5. The 'Salal Dam' is built on which among the following rivers?

- (a) Yamuna
- (b) Chenab
- (c) Godavari
- (d) Beas

Answer: (b) Chenab

Explanation:

In NEWS: India slams Pakistan for reckless warmongering, hateful comments on suspension of Indus Water Treaty

Salal Dam:

- Salal Dam is a hydroelectric dam built on the **Chenab River** in Reasi district, Jammu and Kashmir, India. **Hence option (b) is correct.**
- It is a gravity dam designed primarily for hydroelectric power generation.
- The dam has an installed capacity of 690 MW, with 6 units of 115 MW each.
- The project was completed in two stages: Stage I in 1987 and Stage II in 1995.
- It is operated by NHPC Limited (National Hydroelectric Power Corporation).
- The Chenab River is one of the three western rivers governed by the Indus Waters Treaty (1960) between India and Pakistan.
- Due to treaty restrictions and Pakistan's objections, the dam's design was modified, including reducing its storage capacity.
- The dam has limited storage and primarily functions as a run-of-the-river project.
- The Chenab carries a high silt load, which has caused sedimentation issues in the reservoir.
- Despite challenges, Salal Dam plays a crucial role in power supply for Jammu and Kashmir and the northern grid of India.
- The dam was a subject of bilateral discussions between India and Pakistan, as the Chenab River is a western river under the Indus Waters Treaty (1960).

Projects Allowed Under the IWT:

India has rights over eastern rivers (Ravi, Beas, Sutlej) and limited rights (non-consumptive) over western rivers (Indus, Jhelum, Chenab). So, most of India's large projects on western rivers are run-of-the-river dams.

● On Eastern Rivers (Full Rights)

- Bhakra Dam – Sutlej River, Himachal Pradesh
- Pong Dam – Beas River, Himachal Pradesh
- Ranjit Sagar Dam (Thein Dam) – Ravi River, Punjab
- India uses these rivers extensively for irrigation, power, and storage.

● On Western Rivers (Limited Rights, Run-of-the-River Only)

● Chenab River:

- Salal Dam – 690 MW
- Baglihar Dam – 900 MW
- Dulhasti Project – 390 MW
- Ratle Dam – 850 MW (under construction, controversial)
- Pakal Dul Project – 1000 MW (on a tributary, under construction)

● Jhelum River:

- Uri I & II – 720 MW combined
- Kishanganga Hydroelectric Project – 330 MW (diverts water from Kishanganga to Jhelum)

Source:

<https://www.thehindu.com/news/national/any-misadventure-will-have-painful-consequences-mean-comments-by-pakistan-leaders/article69932605.ece>

6. Atlantic meridional overturning circulation (AMOC)

6. Consider the following statements:

Statement-I: Countries like the UK, Ireland, and parts of Scandinavia have milder winters than Canada

Statement-II: The Atlantic Meridional Overturning Circulation (AMOC) carries warm surface water from the tropics northward via the Gulf Stream.

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

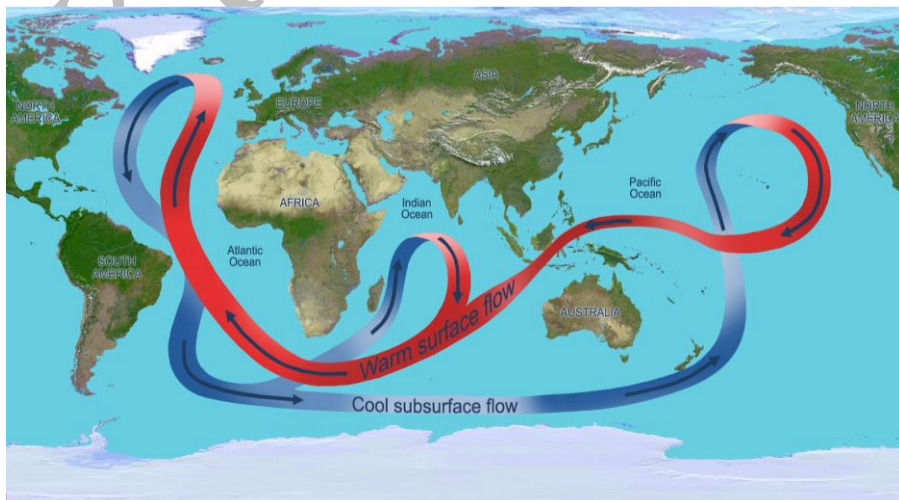
Answer: (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I

Explanation:

In NEWS: Europe May Freeze Despite Global Warming If Atlantic Current Collapses, Study Shows

The Atlantic Meridional Overturning Circulation (AMOC):

- The Atlantic Meridional Overturning Circulation (AMOC) is a major component of Earth's climate system.
- It carries warm surface water from the tropics northward (via the Gulf Stream), where it cools, becomes denser, sinks, and then flows back southward at depth—forming a critical "conveyor belt" of ocean heat transport. This process **significantly helps keep northwest Europe warmer than it would otherwise be.**



Significance of AMOC:

Climate Stabilization

- Keeps Northwestern Europe warm: Countries like the UK, Ireland, and parts of Scandinavia have milder winters than similar latitudes (e.g., Canada) due to AMOC. **Hence both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I**

- Regulates tropical rainfall patterns, especially the African and South Asian monsoons.

Global Heat Distribution

- It transfers huge amounts of heat from the Equator to the poles.
- Balances Earth's energy budget, helping reduce temperature extremes.

Influences Weather Patterns

- AMOC shifts can influence hurricanes, droughts, and storm tracks across the Atlantic basin and beyond.
- A weakened AMOC can lead to colder winters in Europe, hotter, drier conditions in Africa, and intensified hurricanes in the Atlantic.

Sea Level Regulation

- Weakening of AMOC can lead to regional sea level rise, especially along the U.S. East Coast.

Carbon and Nutrient Cycle

- AMOC helps sequester carbon dioxide in deep oceans.
- Drives nutrient upwelling, crucial for marine ecosystems and fisheries.

What Happens If AMOC Collapses?

- Europe could cool by 3–5°C or more within decades.
- The Sahel (Africa) may face severe droughts.
- Amazon rainforest could face ecosystem stress due to drier conditions.
- South Asia may see disrupted monsoons, affecting agriculture.
- Global climate patterns could destabilize, leading to food and water insecurity.

PYQ REFERENCE:

Q. Which of the following is/are correct inference/inferences from isothermal maps in the month of January?

1. The isotherms deviate to the north over the ocean and to the south over the continent.
2. The presence of cold ocean currents, Gulf Stream and North Atlantic Drift make the North Atlantic Ocean colder and the isotherms bend towards the north.

Select the 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.hindustantimes.com/science/the-shutdown-of-ocean-currents-could-freeze-europe-101755260790261.html>

7. Godavari river

7. Consider the following statements:

1. Godavari is India's third longest river after the Ganga and Brahmaputra.
2. It is Known as "Dakshina Ganga" or "Ganga of the South"
3. Its left bank tributaries include Manjira and Manair.
4. Kumbh Mela is held in Nashik on the banks of the Godavari.

Which of the statements given above is/are correct?

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

Answer: (b) 2 and 4 only

Explanation:

In NEWS: Flood warning issued for Bhadrachalam Agency in Telangana as Godavari swells

Godavari river:

- The Godavari is India's second longest river after the Ganga River and drains the third largest basin in India, covering about 10% of India's total geographical area.

Hence statement 1 is incorrect.

- Its source is in Trimbakeshwar, Nashik, Maharashtra.
- It flows east for 1,465 kilometres (910 mi), draining the states of Maharashtra (48.6%), Telangana (18.8%), Andhra Pradesh (4.5%), Chhattisgarh (10.9%) and Odisha (5.7%).
- The river ultimately empties into the Bay of Bengal through an extensive network of distributaries.
- It is Known as "Dakshina Ganga" or "Ganga of the South". Hence statement 2 is correct.

Major Tributaries

Left-Bank Tributaries: Purna, Pranhita (formed by Wardha + Wainganga), Indravati, Sabari

Right-Bank Tributaries: Manjira, Manair. Hence statement 3 is incorrect.



Important Dams and Projects

Dam/Project	Location	Purpose
Jayakwadi Dam	Maharashtra (Aurangabad)	Irrigation, drinking water
Sriram Sagar Project	Telangana	Irrigation, hydropower
Polavaram Project	Andhra Pradesh	Multi-purpose
Dowleswaram Barrage	Near Rajahmundry	Water regulation

Ecological and Cultural Significance

- Flows through Western Ghats, Eastern Ghats, and Deccan Plateau.
- Papikonda National Park and Coringa Wildlife Sanctuary lie in the Godavari basin.
- Kumbh Mela is held in Nashik on the banks of the Godavari. Hence statement 4 is correct.
- Mentioned in ancient texts like Ramayana — Lord Rama is said to have stayed along its banks during exile.

PYQ REFERENCE:

Q. Consider the following rivers:

1. Vamsadhara
2. Indravati
3. Pranahita
4. Pennar

Which of the above are tributaries of Godavari?

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

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/144849/OPS/GQ1EOS13T.1+GRFEPUU16.1.html

8. Lipulekh Pass

8. The Lipulekh Pass is located in the trijunction of

- (a) India, the Tibet region of China and Nepal
- (b) India, Pakistan and Afghanistan
- (c) India, Bangladesh and Nepal
- (d) India, the Tibet region of China and Bhutan

Answer: (a) India, the Tibet region of China and Nepal

Explanation:

In NEWS: India-China border trade through Lipu Lekh 'unexpected and unacceptable' to Nepal, says former Nepali Foreign Minister

Lipulekh Pass:

- The Lipulekh Pass is a Himalayan pass on the border between Uttarakhand, India and the Tibet region of China, near their trijunction with Nepal. **Hence option (a) is correct.**
- Nepal has had ongoing claims to the southern side of the pass, called Kalapani territory, which has been under Indian administration from the British colonial period.
- The pass is near the trading town of Taklakot (Purang) in Tibet and has been used since ancient times by traders, mendicants and pilgrims transiting between India and Tibet.
- It is also used by pilgrims to Kailash and Manasarovar.



Geopolitical Significance:

- Strategically important for India due to its proximity to the Line of Actual Control (LAC) with China
- India conducts regular troop and supply movements through this region
- Recently developed Dharchula-Lipulekh road to improve access for both military and pilgrims

Religious Importance:

- Used by pilgrims for the Kailash Mansarovar Yatra (a sacred Hindu and Buddhist pilgrimage in Tibet)

Territorial Dispute:

- Nepal claims the Lipulekh area (along with Kalapani and Limpiyadhura) as its own

- The dispute intensified after India inaugurated a road to Lipulekh in 2020
- Nepal responded by issuing a new political map showing these areas within its borders
- India maintains that these areas are part of its sovereign territory

Source:

<https://www.thehindu.com/news/international/india-china-border-trade-through-lipu-lekh-unexpected-and-unacceptable-to-nepal-says-former-nepali-foreign-minister/article69965553.ece>

9. Jute

9. "The crop thrives in a warm, humid, monsoon climate, with temperature ranging from 24°C to 35–37°C in deep, fertile grey alluvial soils. The crop matures in 100–150 days. The crop bundles are left in the field for defoliation, then undergo retting." Which one of the following is that crop?

- (a) Cotton
- (b) Jute
- (c) Sugarcane
- (d) Tea

Answer: (b) Jute

Explanation:

In NEWS: Harvesting of Jute has begun

Jute:

- Jute is a long, soft, shiny bast fiber that can be spun into coarse, strong threads.
- It is primarily used to make gunny bags, ropes, carpets, and eco-friendly textiles.
- It is a **Kharif (Monsoon) crop**.

Jute production in India:

- **India is the world's largest producer of jute goods**, contributing around 70–75% of global output, with West Bengal being the dominant state, responsible for roughly 75–80% of production.
- **Jute-producing states in India:** West Bengal, Bihar, Assam, Odisha, Meghalaya, Nagaland, Andhra Pradesh, Tripura and Chhattisgarh.

Growing Conditions for Jute in India

Climate Requirements:

- Jute thrives in a **warm, humid, monsoon climate**, with temperature ranging from 24°C to 35–37°C and relative humidity between 70% and 90%. Some sources narrow it to optimal humidity of 80–90%

- Annual rainfall needs to be substantial—ideally between 120 cm to 200 cm, with well-distributed pre-monsoon showers (25–55 cm) aiding early growth

Soil Characteristics

- The best soils are **deep, fertile grey alluvial soils**, enriched by annual flood deposits—especially in the Ganges delta
- Loamy alluvial soils, or sandy loams and clay loams are acceptable, but laterite and gravel soils are unsuitable
- Ideal soil **pH ranges between 6.0–7.5** (some say 4.8–5.8), depending on the region and crop type

Agronomic Practices

- **Sowing period:** Kharif crop—generally sown from March to early June, depending on pre-monsoon rains
- **Harvesting:** The crop matures in 100–150 days. Bundles are left in the field for defoliation, then undergo retting (soaking) for 8–20 days to separate fibers
- **Varieties:** Two primary species—White jute (*Corchorus capsularis*) and Tossa jute (*Corchorus olitorius*), each with different fiber qualities and water sensitivities

Hence option (b) is correct.

Harvest time



Villagers process jute in a water body in Guwahati on Friday, Assam, India's second-largest producer after West Bengal, relies on jute as a key cash crop supporting small and marginal farmers and the State's economy. RITU RAJ KONWAR

PYQ REFERENCE:

Q. The lower Gangetic plain is characterised by humid climate with high temperature throughout the year. Which one among the following pairs of crops is most suitable for this region?

- (a) Paddy and Cotton
- (b) Wheat and Jute
- (c) Paddy and Jute**
- (d) Wheat and cotton

Source: The Hindu

10. Kilauea volcano

10. Consider the following statements:

1. Kilauea is part of the Hawaiian-Emperor seamount chain, formed by the movement of the Pacific Plate over the Hawaiian hotspot.
2. It is a type of stratovolcano with highly viscous lava emission.
3. It remains dormant for the past five decades

Which of the statements given above is/are correct?

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

Answer: (a) 1 only

Explanation:

In NEWS: Kilauea volcano in Hawaii erupts with 100-ft lava fountains

Kilauea volcano:

- Kilauea is an active **shield volcano** located on the Big Island of Hawaii, USA.
- It is one of the most active volcanoes in the world.
Hence statement 2 is incorrect.
- Kilauea is part of the Hawaiian-Emperor seamount chain, formed by the movement of the Pacific Plate over the Hawaiian hotspot. **Hence statement 1 is correct.**
- It rises 1,247 metres (4,091 feet) above sea level and covers nearly 14% of the Big Island.
- Its name “Kilauea” means “spewing” or “spreading” in Hawaiian, referring to its frequent lava outpourings.
- The volcano has two major rift zones: the East Rift Zone and the Southwest Rift Zone.
- It has been erupting frequently for centuries, with a notable continuous eruption from 1983 to 2018, one of the longest in modern history. **Hence statement 3 is incorrect.**
- The 2018 eruption destroyed over 700 homes, displaced thousands, and added new landmass to the island.
- Kilauea’s summit crater is called Halema’uma’u, traditionally believed to be the home of Pele, the Hawaiian goddess of fire and volcanoes.
- The volcano is part of Hawai’i Volcanoes National Park, a UNESCO World Heritage Site.

PYQ REFERENCE:

Q. Consider the following statements:

1. The Barren Island volcano is an active volcano located in Indian territory.
2. Barren Island lies about 140 km east of Great Nicobar.
3. The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.

Which of the statements given above is/are correct?

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

Source: <https://www.newsonair.gov.in/kilauea-volcano-in-hawaii-erupts-with-100-ft-lava-fountains/>

11. Cherrapunji

11. Consider the following statements :

Statement-I: Cherrapunji is famous for being one of the wettest places on Earth.

Statement-II: Cherrapunji records the highest rainfall than any other states in India.

Statement-III: The Moisture-laden southwest monsoon winds from the Bay of Bengal and the abrupt orographic uplift causes heavy condensation and continuous rainfall in Cherrapunji.

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

- (a) Both Statement-II and Statement-III are correct and both of them explain Statement-I
(b) Both Statement-II and Statement-III are correct, but only one of them explains Statement-I
(c) Only one of the Statements II and III is correct and that explains Statement-I
(d) Neither Statement-II nor Statement-III is correct

Answer: (c) Only one of the Statements II and III is correct and that explains Statement-I

Explanation:

In NEWS: Cherrapunji on way to driest monsoon on record, Surlabbi, Tamhini wettest spots in India

- Cherrapunji (locally called Sohra) is located in the East Khasi Hills district of Meghalaya.
- Rainfall – It is famous for being one of the wettest places on Earth, receiving an annual rainfall of about 11,000–12,000 mm on average. **Hence statement I is correct.**
- Nearby **Mawsynram** often records even higher rainfall, competing with Cherrapunji for the title of “wettest place on Earth.” **Hence statement II is incorrect.**

- Reason for high rainfall –
 - Moisture-laden southwest monsoon winds from the Bay of Bengal strike the Khasi Hills directly.
 - The abrupt orographic uplift causes heavy condensation and continuous rainfall. **Hence statement III is correct and explains statement I.**
- Rainfall pattern – Rainfall is seasonal (monsoon concentrated) and often occurs in intense downpours, leading to soil erosion and lack of perennial rivers despite high rainfall.
- Climate – Despite heavy rains, water scarcity is common due to runoff and lack of groundwater storage.
- Unique features –
 - Home to the famous living root bridges built by Khasi tribes.
 - Declared an Eco-Sensitive Zone by the Government of India.

PYQ REFERENCE:

Q. Consider the following statements :

Statement-I: Rainfall is one of the reasons for weathering of rocks.

Statement-II: Rain water contains carbon dioxide in solution.

Statement-III: Rain water contains atmospheric oxygen.

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.downtoearth.org.in/climate-change/cherrapunji-on-way-to-driest-monsoon-on-record-surlabbi-tamhini-wettest-spots-in-india>

12. Shipki-La Pass

12. Consider the following pairs:

Mountain passes Their locations

1. Shipki La – Sikkim
2. Nathu La – Uttarakhand
3. Lipulekh – Himachal Pradesh

How many of the above pairs are correctly matched?

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

Answer: (d) None

Explanation:

In NEWS: China has agreed in principle to reopen the Shipki-La trade route in Himachal Pradesh's Kinnaur district.

Shipki-La Pass:

- Shipki-La is a mountain pass on the Indo-China border in Himachal Pradesh's Kinnaur district.
- It lies at an altitude of around 4,720 metres in the Himalayas.
- The Sutlej River enters India from Tibet through this pass.
- It has been an ancient trade route between India and Tibet.
- The pass is one of the official border trade points between India and China.
- Trade mainly involves items like apples, wool, and local produce.
- Due to its location on the Line of Actual Control (LAC), it holds strategic importance.
- Entry through the pass is restricted and requires special government permission.

Note:

Nathu La – Sikkim

Lipulekh – Uttarakhand

Hence no pair is correctly matched.

OTHER IMPORTANT MOUNTAIN PASSES:



Source: <https://www.gktoday.in/shipki-la-pass-2/>

ART AND CULTURE

1. Pingali Venkayya

1. He served in the Boer War in South Africa where he met Mahatma Gandhi, a meeting that shaped his thinking forever. Later at a Congress session, he saw the British Union Jack being hoisted. That sight hurt him deeply. Then in 1906, he proposed the idea of designing a national flag during an All India Congress Committee session. Between 1916 and 1921, he published a collection of over 30 proposed flag designs. Finally, his vision came to life in 1947, post-independence, when a committee helmed by Rajendra Prasad finalised the flag's design. The committee retained his design but replaced the Charkha with the Dharma Chakra symbolising law, righteousness, and progress. He was

- (a) Udaya Kumar
- (b) Pingali Venkayya
- (c) Rabindranath Tagore
- (d) Pattabhi Sitaramaiah

Answer: (b) Pingali Venkayya

Explanation:

In NEWS: PM pays tribute to Pingali Venkayya ji on his birth anniversary

Pingali Venkayya:

- Pingali was born on 2 August 1879 in the serene village of Pedakallipalli in Andhra Pradesh's Krishna district.
- As a young man, Pingali served in the Boer War in South Africa. There, he met Mahatma Gandhi, a meeting that would shape his thinking forever.
- Gandhi spoke of freedom and identity, and Pingali saw the power of symbols in a freedom movement. That's when an idea started to take root.
- One moment stuck with him: at a Congress session, he saw the British Union Jack being hoisted. That sight hurt him deeply. Why were Indians saluting a colonial flag?
- In 1906, Pingali proposed the idea of designing a national flag during an All India Congress Committee session.
- Between 1916 and 1921, Venkayya published **Bharatha Deshaniki Oka Jatiya Patakam**, a collection of over 30 proposed flag designs, researched against the backdrop of flags from 30+ countries to reflect India's ethos.
- He introduced a tricolour flag to Mahatma Gandhi. Pingali's tricolour design **symbolised purity (white), sacrifice (red), and hope (green)**. Centrally, a Charkha (spinning wheel) was placed, illustrating India's unity

amidst diversity. However, it wasn't immediately adopted as the national flag.

- Pingali's vision came to life in 1947, post-independence, when a committee helmed by **Rajendra Prasad finalised the flag's design**. They retained Pingali's design but replaced the Charkha with the Dharma Chakra symbolising law, righteousness, and progress.

- **On 22 July 1947**, a modified version of Pingali's design became India's national flag

Hence option (b) is correct.

PYQ REFERENCE:

Q. With reference to Madanapalle of Andhra Pradesh, which one of the following statements is correct?

- (a) Pingali Venkayya designed the tricolor Indian National Flag here.
- (b) Pattabhi Sitaramaiah led the Quit India Movement of Andhra region from here.
- (c) Rabindranath Tagore translated the National Anthem from Bengali to English here.**
- (d) Madame Blavatsky and Colonel Olcott set up headquarters of Theosophical Society first here.

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2151708>

2. Arya Samaj

2. Which of the following statements is/are correct regarding Arya Samaj?

- 1. Arya Samaj is a Hindu reform movement founded by Raja Ram Mohan Roy.
- 2. It promotes the values and practices based on the belief in the infallible authority of the Vedas.
- 3. It supports idol worship and promotes monotheism.

Select the correct answer using the codes given below:

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

Answer: (c) 2 only

Explanation:

In NEWS: Why Arya Samaj marriages are under the scanner of courts

Arya Samaj:

- Arya Samaj is a Hindu reform movement founded by Swami Dayananda Saraswati in 1875 in Bombay (now Mumbai), India. **Hence statement 1 is incorrect.**

- It aimed to reform and revive the original teachings of the Vedas, which Dayananda believed to be the true basis of Hinduism. **Hence statement 2 is correct.**

Key Principles of Arya Samaj:

- **Belief in One God:** Arya Samaj rejects idol worship and promotes monotheism—belief in a single, formless God. **Hence statement 3 is incorrect.**

- **Authority of the Vedas:** Only the four Vedas (Rig, Yajur, Sama, Atharva) are considered infallible sources of spiritual knowledge.

- **Rejection of Superstition and Rituals:** Practices like idol worship, caste-by-birth, animal sacrifice, pilgrimages, astrology, and untouchability are rejected.

- **Promotion of Equality:** Arya Samaj believes in gender and social equality. It supports women's education and the upliftment of marginalized communities.

- **Education:** Strong emphasis is placed on Vedic education, moral values, and scientific learning. Institutions like DAV (Dayanand Anglo-Vedic) schools and colleges were established.

- **Social Reform:** It supports widow remarriage, opposes child marriage, and promotes inter-caste marriage.

- **Sanskrit and Hindi:** Promotes Sanskrit as a sacred language and Hindi as the national language.

Activities and Contributions

- **Shuddhi Movement:** Aimed at reconverting non-Hindus back to Hinduism.

- **Educational Reform:** Established schools and colleges combining modern education with Vedic values.

- **Women's Rights:** Advocated for women's right to education, marriage choice, and property.

- **Freedom Movement:** Many Arya Samaj members participated in India's struggle for independence.

PYQ REFERENCE:

Q. Which of the following statements is/are correct regarding Brahmo Samaj?

- 1. It opposed idolatry.
- 2. It denied the need for a priestly class for interpreting the religious texts.
- 3. It popularized the doctrine that the Vedas are infallible

Select the correct answer using the codes given below:

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

Source:

<https://indianexpress.com/article/explained/explain-ed-law/why-arya-samaj-marriages-are-under-the-scanner-of-courts-10164498/>

3. Sarnath

3. Consider the following statements:

1. It is Sarnath that the foundation of the Buddhist Sangha took place.
2. The Ashokan pillar with inscriptions from Sarnath was taken as inspiration for India's national emblem.

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: 'Ancient Buddhist Site, Sarnath' submitted as India's nomination to UNESCO for 2025-26 cycle

Sarnath:

- Sarnath is one of the most important Buddhist pilgrimage sites in the world.
- Located near **Varanasi**, near the confluence of the Ganges and the Varuna rivers in **Uttar Pradesh**, India.
- It holds immense historical, religious, and cultural significance.

Historical Significance of Sarnath:

First Sermon of Gautama Buddha

- Buddha delivered his first sermon, known as the **Dhammacakkappavattana Sutta** ("Setting the Wheel of Dharma in Motion"), to five ascetics.
- This event marked the **foundation of the Buddhist Sangha** (monastic community), making Sarnath one of the four holy sites of Buddhism, alongside Lumbini, Bodh Gaya, and Kushinagar. **Hence statement 1 is correct.**

Ashokan Era (3rd century BCE):

- **The Lion Capital of Ashoka**, originally atop the pillar in Sarnath, became the National Emblem of India. **Hence statement 2 is correct.**

- Ashoka's inscriptions at Sarnath promoted non-violence (Ahimsa), dharma, and religious tolerance.

Development of Buddhist Art & Architecture:

- During the Gupta period (4th–6th centuries CE), it produced some of the finest examples of **Buddhist iconography**—notably serene stone images of the Buddha in various mudras (poses).
- The Dhamek Stupa and other ruins show the architectural evolution from the Maurya to the Gupta periods.

Educational and Monastic Hub:

- Scholars and pilgrims from China (like Faxian and Xuanzang) visited and described Sarnath in their travel records.

- Xuanzang noted that thousands of monks studied at Sarnath during his 7th-century visit.

Decline and Rediscovery:

- Sarnath was destroyed in the 12th century CE during invasions by Muslim rulers, leading to its decline.
- The site was rediscovered and excavated by British archaeologists in the 19th century, revealing many of its ancient structures and artifacts.

PYQ REFERENCE:

Q. Consider the following properties included in the World Heritage List released by UNESCO:

1. Shantiniketan
2. Rani-ki-Vav
3. Sacred Ensembles of the Hoysalas
4. Mahabodhi Temple Complex at Bodhgaya

How many of the above properties were included in 2023?

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

Source: <https://theprint.in/india/ancient-buddhist-site-sarnath-submitted-as-indias-nomination-to-unesco-for-2025-26-cycle/2712993/>

4. Quit India Movement

4. The famous slogan "Quit India" was coined by

- (a) Mahatma Gandhi
(b) Yusuf Meherally
(c) Bal Gangadhar Tilak
(d) Sarojini Naidu

Answer: (b) Yusuf Meherally

Explanation:

In NEWS: Prime Minister pays tributes to all people who took part in Quit India Movement

The Quit India Movement:

- The Quit India Movement, also known as the Bharat Chhodo Andolan, was officially launched on 8 August 1942 by the Indian National Congress at the Gowalia Tank Maidan in Bombay (now Mumbai). The movement was a response to the growing frustration with British colonial rule during the turmoil of World War II.

Background Context:

Cripps Mission Failure (March 1942):

- Sent by Britain to gain Indian support in WWII.
- Promised dominion status after the war but not immediate independence.

- Rejected by Indian leaders.

Global War Situation:

- Japanese forces had captured Burma, Malaya, and Singapore.
- There was a genuine fear of a Japanese invasion of India.
- The British Viceroy had committed India to the war effort in 1939 without consulting Indian leaders, worsening relations.

Quit India Resolution (14 July 1942):

- Passed by the Congress Working Committee at Wardha.
- Demanded an end to British rule.
- Slogan "Quit India" coined by Yusuf Meherally.

Hence option (b) is correct.

Gandhi's Leadership:

- At the Bombay session, Gandhi gave the iconic call to action: "Do or Die"
- Advocated for mass nonviolent resistance.

PYQ REFERENCE:

Q. With reference to 8th August, 1942 in Indian history, which one of the following statements is correct?

- (a) The Quit India Resolution was adopted by the AICC.
- (b) The Viceroy's Executive Council was expanded to include more Indians.
- (c) The Congress ministries resigned in seven provinces.
- (d) Cripps proposed an Indian Union with full Dominion Status once the Second World War was over.

Q. Which one of the following observations is not true about the Quit India Movement of 1942?

- (a) It was a nonviolent movement
- (b) It was led by Mahatma Gandhi
- (c) It was a spontaneous movement
- (d) It did not attract the labour class in general

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2154529>

5. Piprahwa relics

5. Consider the following pairs:

	Site	Historical Significance
1	Piprahwa	Discovery of relics believed to be of the Buddha
2	Rajgir	Venue of the First Buddhist Council
3	Lothal	Site of a dockyard and maritime trade in the Harappan period
4	Kalibangan	Evidence of fire altars and early ploughed agricultural field

Which 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: Bringing them home: On the repatriation of the Piprahwa relics

Explanation:

- **Piprahwa:** In UP; Buddhist relics found in a stupa, linked to early Buddhism. **Hence pair 1 is correct.**
- **Rajgir:** Site of the First Buddhist Council, shortly after Buddha's death. **Hence pair 2 is correct.**
- **Lothal:** Located in Gujarat; known for dockyard and trade activity during Harappan period. **Hence pair 3 is correct.**
- **Kalibangan:** In Rajasthan; unique for fire altars (possibly ritual use) and ploughed fields, a rare agricultural feature in IVC sites. **Hence pair 4 is correct.**

Piprahwa — Discovery of relics of Buddha

- Located in Uttar Pradesh.
- Excavated in 1898 by William Peppe.
- Contained relics and Brahmi inscriptions referring to the Buddha or the Shakya clan. ● One of the earliest Buddhist relic sites.

Rajgir — First Buddhist Council:

- Located in Bihar (ancient Rajagriha).
- Site of the First Council, held after Buddha's death.
- Presided by Mahakassapa, supported by King Ajatashatru.
- Teachings compiled into Vinaya and Sutta Pitaka.

Lothal — Dockyard and maritime trade

- Located in Gujarat; part of the Indus Valley Civilization.
- Famous for its dockyard, showing overseas trade.
- Finds include beads, weights, and seals.

Kalibangan — Fire altars and ploughed field

- Located in Rajasthan (IVC site).
- Evidence of fire altars (ritual use).
- First site to show ploughed agricultural field.

PYQ REFERENCE:

Q. Consider the following pairs:

	Historical Place	Well known for
1	Burzahom	Rock cut shrines
2	Chandraketugarh	Terracotta art
3	Ganeshwar	Copper artefacts

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

- (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/opinion/editorial/bringing-them-home-on-the-repatriation-of-the-piprahwa-relics/article69920447.ece>

6. Kakori Incident

6. Consider the following freedom fighters:

- Ram Prasad Bismil
- Ashfaqulla Khan
- Rash Behari Bose

Who of the above was/were actively associated with the Kakori incident?

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

Answer: (a) 1 and 2

Explanation:

In NEWS: PM pays tributes to the courage of patriotic Indians at Kakori on its centenary

The Kakori Incident:

- The Kakori Incident was a significant event in India's freedom struggle, carried out by Hindustan Republican Association (HRA), a revolutionary organization.
- The primary aim of the HRA was to overthrow British colonial rule using revolutionary tactics and direct action, including armed resistance and raids on government treasuries. ● On August 9, 1925, a group of revolutionaries, led by **Ram Prasad Bismil and Ashfaqulla Khan**, planned to rob a train carrying government funds from Shahjahanpur to Lucknow. **Hence option (a) is correct.**
- The idea was to use the stolen money to fund the activities of the HRA and further the cause of Indian independence.
- ☑ **The revolutionaries attacked the train at Kakori, near Lucknow, and looted the treasury that was onboard.**
- Over 8000 rupees were seized, which was a significant

sum at the time. ● While the heist was successful, it also drew immediate attention from the British authorities, leading to a crackdown on the revolutionaries.

Aftermath:

- The British government responded swiftly, arresting the participants involved in the raid. ● Many of the revolutionaries were captured, and after a trial, Ram Prasad Bismil, Ashfaqulla Khan, Roshan Singh, and Rajendra Lahiri were **sentenced to death**. ● The death sentences were carried out in December 1927, and the event became a symbol of sacrifice and courage for the Indian freedom movement.
- Several others were also jailed, and the incident led to widespread outrage and galvanized support for revolutionary activities across India.

Significance:

- The Kakori Incident was one of the most daring acts of armed resistance against British rule during the early 20th century.
- The incident marked a shift towards more radical, direct-action tactics by revolutionaries in their fight for independence, which contrasted with the non-violent resistance led by figures like Mahatma Gandhi.
- The execution of Bismil, Ashfaqulla Khan, and others inspired a new generation of nationalists to engage in the struggle for independence.
- While the Kakori Incident did not immediately lead to British concessions, it intensified the revolutionary movement and contributed to the growing sense of urgency for independence.
- It also led to a growing divide between the moderate and radical factions within the Indian National Congress and other political groups.

PYQ REFERENCE:

Q. Consider the following freedom fighters:

- Barindra Kumar Ghosh
- Jogesh Chandra Chatterjee
- Rash Behari Bose

Who of the above was/were actively associated with the Ghadar Party?

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

Source:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2154621>

7. National Handloom Day 2025

7. The National Handloom Day is observed annually on 7 August to commemorate which of the following historical movements?

- (a) Ahmedabad Mill Strike satyagraha
- (b) Champaran Satyagraha
- (c) Non-Cooperation Movement
- (d) Swadeshi Movement

Answer: (d) Swadeshi Movement

Explanation:

In NEWS: National Handloom Day 2025 Date, History and Theme: This year marks the 11th anniversary of the day and will be celebrated on 7th August 2025, with the theme "Weaving Innovation into Tradition."

National Handloom Day 2025:

- National Handloom Day is observed annually on 7 August, commemorating the launch of the Swadeshi Movement in 1905—a pivotal step in India's freedom struggle advocating indigenous goods, especially handloom products. **Hence option (d) is correct.**
- The initiative to designate this day as National Handloom Day was taken in 2015, and the first official celebration was inaugurated by Prime Minister Narendra Modi in Chennai
- National Handloom Day in India 2025: The Indian handloom industry is one of the oldest and most vibrant cottage industries globally, with 95% of the world's handwoven fabric coming from India.
- National Handloom Day marks the launch of the Swadeshi Movement on August 7, 1905, celebrating its enduring legacy and crucial role in India's struggle for independence.
- This day in India originated with the Swadeshi Movement, which began on August 7, 1905, during India's struggle for independence from British control.

PYQ REFERENCE:

Q. Consider the following statements:

Statement-I: 7th August is declared as the National Handloom Day.

Statement-II: It was in 1905 that the Swadeshi Movement was launched 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.

Source: <https://indianexpress.com/article/when-is-national-handloom-day-2025-date-theme-origin-significance-and-celebrations-10174570/>

8. Mudhuvan Tribe

8. Consider the following statements:

1. The Muthuvan tribe is a forest-dwelling community.
2. They reside in the border hill forests of Meghalaya and Tripura.
3. They follow a unique system of governance called the "Kani System," where each village is headed by a "Kani" who is responsible for administration and enforcing traditional laws.

Which of the statements given above is/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: Kerala's Muthuvan tribe comes together to protect their language, culture

The Muthuvan tribe:

- The Muthuvan tribe, also known as **Mudhuvan** or **Mudugar**, is a **forest-dwelling community** found in the border hill forests of Kerala and Tamil Nadu, particularly in the **Anaimalai hills**. They are primarily cultivators and are known for their deep connection with forests and wildlife. **Hence statement 1 is correct.**
- **Location and Language:** They reside in the border hill forests of Kerala and Tamil Nadu. **Hence statement 2 is incorrect.** They are divided into two groups: Malayalam Muthuvan and Pandi Muthuvan, each speaking a slightly different dialect.
- **Social Structure:** The tribe is organized into six clans (Koottams), further divided into sub-clans that regulate marriage alliances and social status. They practice community endogamy and clan exogamy.
- **Governance:** They follow a unique system of governance called the "**Kani System**," where each village is headed by a "Kani" who is responsible for administration and enforcing traditional laws. **Hence statement 3 is correct.**
- **Beliefs:** The Muthuvans are animists and spirit worshippers, honoring forest deities and ancestral spirits.

They believe their ancestors were the first migrants to the hill forests.

- **Occupation:** Traditionally, they practice "Virippukrishi" (shifting cultivation) and cultivate various food grains for consumption, such as ragi, maize, and millet. Some also cultivate cash crops like ginger, pepper, and cardamom.
- **Traditional Knowledge:** They are known for their traditional knowledge of the hills and their ability to coexist with wildlife. This expertise has been valuable in conservation efforts like the Nilgiri Tahr Project. They are also known for their traditional medicines, which are passed down through generations.

Source:

<https://www.thehindu.com/news/national/kerala/keralas-muthuvan-tribe-comes-together-to-protect-their-language-culture/article69913674.ece>

9. Sri Aurobindo

9. Consider the following statements:

1. He advocated radical nationalism and armed resistance against British rule.
2. He is also an active participant in Indian National Congress and revolutionary group Anushilan Samiti.
3. In his work 'The Life Divine (1939)' he outlines his vision of spiritual evolution on Earth.
4. He believed that human evolution would progress beyond mind to a supermind, enabling a divine life in the material world.

Who among the following is associated with the above descriptions?

- (a) Rash Behari Bose
- (b) Barindra Kumar Ghosh
- (c) Swami Vivekananda
- (d) Sri Aurobindo

Answer: (d) Sri Aurobindo

Explanation:

In NEWS: Prime Minister Narendra Modi pays tribute to Sri Aurobindo on his Birth Anniversary

Sri Aurobindo (1872–1950):

- Sri Aurobindo was an Indian yogi, philosopher, poet, and nationalist who played a crucial role in the early Indian independence movement and later became a leading spiritual thinker.

Early Life & Education

- Born on August 15, 1872, in Calcutta (now Kolkata).

- Sent to England as a child for education; studied at St. Paul's School and Cambridge University.
- Became fluent in several European and classical languages.
- Joined Cambridge Majlis, a South Asian political forum, where he developed interest in Indian nationalism.
- In 1893, accepted a job in Baroda offered by Maharaja Sayajirao Gaekwad III.

Political Career & Nationalism

- Worked in Baroda until 1906 in various administrative roles; secretly wrote political articles during this time.
- Moved to Calcutta after the Partition of Bengal (1905) to fully join the independence movement.
- Became active in Indian National Congress and revolutionary group Anushilan Samiti.
- Advocated radical nationalism and armed resistance against British rule.
- Arrested in the Alipore Bomb Case (1908) but later acquitted due to lack of evidence.

Spiritual Transformation

- While in jail, underwent a deep spiritual awakening through meditation and reflection.
- After release in 1910, moved to Pondicherry (a French colony) to pursue spiritual life.
- Developed the concept of Integral Yoga, aiming for divine life on earth through spiritual evolution.
- Founded the Sri Aurobindo Ashram in 1926 in Pondicherry.
- Collaborated with Mirra Alfassa ("The Mother"), who became spiritual guide to the community.
- Attracted spiritual seekers from around the world.

Philosophy & Writings

- Major work: The Life Divine (1939), which outlines his vision of spiritual evolution on Earth.
- Believed human evolution would progress beyond mind to a supermind, enabling a divine life in the material world.
- Rejected traditional ideas of moksha as escape; emphasized transformation of earthly life.

Legacy

- Passed away on December 5, 1950, in Pondicherry.
- Revered as both a freedom fighter and a spiritual visionary.
- His philosophy continues to influence spiritual and philosophical thought worldwide.

Hence option (d) is correct.

PYQ REFERENCE:

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=2156838>

10. India's freedom struggle through the writings

10. Consider the following pairs:

	Author	Work
1	Dadabhai Naoroji	Poverty and Un-British Rule in India
2	Bhagat Singh	Why I Am an Atheist
3	Jawaharlal Nehru	How India Wrought for Freedom
4	Annie Besant	An Autobiography

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: (b) Only two pairs

Explanation:

In NEWS: Stories of India's freedom struggle through Tagore, Premchand and Manto

● India's freedom struggle was not just fought on the battlefield or through civil disobedience it was also a deeply intellectual and literary movement. The writings of Indian freedom fighters, thinkers, poets, and reformers played a crucial role in awakening national consciousness, spreading political awareness, and inspiring collective action.

Political Writings and Essays

- **Bal Gangadhar Tilak** – Kesari and The Mahratta (newspapers): He declared, "Swaraj is my birthright, and I shall have it."
- **Dadabhai Naoroji** – Poverty and Un-British Rule in India: Introduced the Drain Theory of British economic exploitation. **Hence pair 1 is correct.**
- **Mahatma Gandhi** – Hind Swaraj (1909): A critique of modern civilization and British rule, and a blueprint for self-rule through nonviolence.

- **Subhas Chandra Bose** – Writings in The Indian Struggle (1934): Outlined his vision for revolutionary nationalism and criticized British repression.
- **Bankim Chandra Chattopadhyay** – Anandamath (1882): Introduced the song "Vande Mataram," which became a nationalist song.
- **Rabindranath Tagore** – Through poetry and songs like Jana Gana Mana (later India's national anthem), he inspired moral and spiritual nationalism.
- **Bhagat Singh** – Wrote Why I Am an Atheist and numerous jail diaries: Expressed deep political and philosophical beliefs. **Hence pair 2 is correct.**
- **Mahatma Gandhi** – The Story of My Experiments with Truth: His journey of self-discovery, ethics, and political beliefs.
- **Jawaharlal Nehru** – An Autobiography (1936): Reflections on politics, nationalism, and his imprisonment. **Hence pair 3 is incorrect.**
- **Annie Besant** – How India Wrought for Freedom: Highlighted India's cultural heritage and the need for independence. **Hence pair 4 is incorrect.**

Source: <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/stories-of-indias-freedom-struggle-through-tagore-premchand-and-manto-10187283/>

11. Gugga Naumi festival

11. Consider the following statements:

1. Gugga Naumi is a popular folk religious festival celebrated across Rajasthan, Haryana, Punjab, Jammu and Kashmir, Uttar Pradesh and other parts of north India.
2. Gugga Naumi is observed on the ninth day of Krishna Paksha in the Bhadrapad month according to the Amavasyath calendar.

Which of the statements given above is/are incorrect?

- (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: What is the Gugga Naumi festival?

Gugga Naumi:

- Gugga Naumi is a popular folk religious festival celebrated across Rajasthan, Haryana, Punjab, Jammu and Kashmir, Uttar Pradesh and other parts of north India. **Hence statement 1 is correct.**

- Gugga Naumi reflects the syncretic and fluid traditions of India where Gugga is worshipped by people of different religions and sects. It also shows the hold of popular religious practices over institutionalised religion.
- Gugga Naumi is observed on the ninth day of Krishna Paksha in the Bhadrapad month according to the Amavasyath calendar. Usually the day is observed after Janmashtami. **Hence statement 2 is correct.**
- The celebration of Gugga Naumi begins on the Rakhi and continues for nine days, commencing with pilgrimages to Gugga Medi village in Hanumangarh district of Rajasthan.
- The Garudas (snake charmers and poison suckers) carry the Chahad (standard) of Guggapir to Hanumangarh.
- Devotional songs called Pir Ke Sole are sung by the Gugga Mandis; prayers and fairs take place in Gugga shrines, called Marhis, dotted across the villages in north India, reflecting Gugga's affinity with the subalterns.
- Gugga, venerated Guaaji by the Hindus and Guggapir or Gugga zahir Pir by Muslims, was a Rajput prince, the son of King Jewar and Queen Bacchan of the Agni vamsa lineage of the Chauhan clan of Rajputs. He is shown riding a blue horse and holds blue and yellow flags. He is believed to possess divine powers to control poisonous snakes. He is specially worshipped for the protective and healing powers by mothers who pray to him for the well being of their children and seek cures for the ailments, while barren women seek the boon of an offspring.

PYQ REFERENCE:

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 2
- (d) 2 and 3

Source:

<https://www.thehindu.com/society/faith/faith-column-august-17-2025/article69943985.ece>

12. The Sarvottam Yudh Seva Medals (SYSM)

12. Consider the following statements in respect of Sarvottam Yudh Seva Medals (SYSM) award:

1. It is awarded for the highest degree of distinguished service in war, conflict, or hostilities.
2. It cannot be awarded posthumously.
3. It is awarded only to the Territorial Army Units.

How many of the above statements are correct?

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

Answer: (a) Only one

Explanation:

In NEWS: The Sarvottam Yudh Seva Medals (SYSM) were awarded in 2025 to seven military leaders for their distinguished service during Operation Sindoor.

The Sarvottam Yudh Seva Medal:

- The Sarvottam Yudh Seva Medal (Ultimate War Service Medal) is India's highest wartime distinguished service decoration.
- It is awarded for the highest degree of distinguished service in an operational context, which includes times of war, conflict, or hostilities. **Hence statement 1 is correct.**
- The award is a war-time equivalent of the Param Vishisht Seva Medal, which is India's highest peacetime distinguished service decoration.
- The medal has been awarded to only 10 officers of the Indian Armed Forces.
- The Sarvottam Yudh Seva Medal may be awarded posthumously. **Hence statement 2 is incorrect.**
- It is awarded for "distinguished service of the most exceptional order during war/conflict/hostilities.
- It may be awarded to all ranks of the Army, the Navy and the Air Force including those of Territorial Army Units, Auxiliary and Reserve Forces and other lawfully constituted Armed Forces when embodied, as well as Nursing Officers and other members of the Nursing Services in the Armed Forces. **Hence statement 3 is incorrect.**

PYQ REFERENCE:

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.gktoday.in/sarvottam-yudh-seva-medals/>

13. Palmyra

13. Palmyra is one of the UNESCO's World Heritage sites is located at

- (a) Syria
- (b) Iran
- (c) Israel
- (d) Jordan

Answer: (a) Syria

Explanation:

In NEWS: Palmyra is one of the six Syrian sites inscribed on UNESCO's World Heritage list, all of which suffered varying degrees of damage during the country's 13-year civil war.

Palmyra:

- Palmyra is an ancient Semitic city located in modern-day Syria, northeast of Damascus. **Hence option (a) is correct.**
- It was a major caravan city linking the Roman Empire with Persia, India, and China along the Silk Road.
- The city flourished during the 1st and 2nd centuries CE under Roman rule.
- Palmyra is famous for its Greco-Roman architecture blended with Persian and local influences.
- Key monuments include the Temple of Bel, the Colonnaded Street, the Theatre, and the Funerary Towers.
- The city was ruled by Queen Zenobia in the 3rd century CE, who rebelled against Rome but was eventually defeated.
- Palmyra was designated a UNESCO World Heritage Site in 1980.

- It suffered extensive destruction during the Syrian Civil War, particularly by the ISIS group in 2015–2017.
- Palmyra's art and architecture reflect a fusion of Greco-Roman, Mesopotamian, and Persian traditions.
- Today, Palmyra stands as a symbol of cultural heritage under threat and international efforts are ongoing to restore and preserve it.

Source: THE HINDU - PICTURE

14. Vithalbhai Patel

14. With reference to Vithalbhai Patel, consider the following statements:

1. He was the first Indian to be elected as the President of the Central Legislative Assembly.
2. He co-founded the Swaraj Party along with C.R. Das and Motilal Nehru.
3. He was the elder brother of Sardar Vallabhbhai Patel.

Which of the above statements is/are correct?

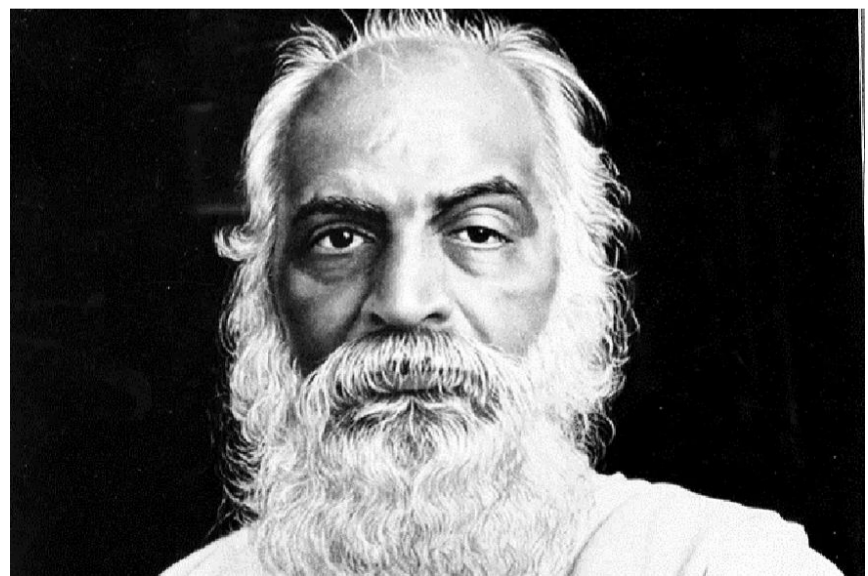
- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Answer: (d) 1, 2 and 3

Explanation:

In NEWS: HM Amit Shah inaugurates All India Speakers' Conference in New Delhi

- The conference has been organised to commemorate the Centenary year of the election of Vithalbhai Patel as the first Indian Speaker of the Central Legislative Assembly.



Vithalbhai Patel:

- Vithalbhai Patel (1873–1933) was a prominent Indian legislator and nationalist leader.

- He was the elder brother of Sardar Vallabhbhai Patel. **Hence statement 3 is correct.**
- A barrister by profession, he was active in the Indian National Congress.
- He became the first Indian elected as President of the Central Legislative Assembly (1925–1930). **Hence statement 1 is correct.**
- Known for conducting proceedings with impartiality, dignity, and authority.
- He played a significant role in asserting the autonomy of the legislature against colonial control.
- He co-founded the Swaraj Party along with C.R. Das and Motilal Nehru in 1923. **Hence statement 2 is correct.**
- He passed away in 1933 in Geneva, Switzerland, while seeking medical treatment.
- His political career symbolized the growing Indian assertion within colonial institutions.

PYQ REFERENCE:

Q. Consider the following statements about Raja Ram Mohan Roy:

- I. He possessed great love and respect for the traditional philosophical systems of the East.
- II. He desired his countrymen to accept the rational and scientific approach and the principle of human dignity and social equality of all men and women.

Which of the statements given above is/are correct?

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

Source: <https://www.newsonair.gov.in/hm-amit-shah-to-inaugurate-all-india-speakers-conference-in-delhi-assembly-today/>