

10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

February, 2025 3rd Week

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Art & Culture, Ancient and Medieval History

- Q.1) Consider the following statements:
- 1. Sambhaji Maharaj was given in the title of 'Maharaja'.
- 2. Shivaji engaged in both conflict and diplomacy with the Mughals, whereas Sambhaji aggressively resisted Mughal expansion without seeking reconciliation.

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- Q.2) Which one of the following sites in Tamil Nadu has provided the earliest evidence of iron use in India?
- a) Adichanallur
- b) Mayiladumparai
- c) Sivagalai
- d) Kausambi
- Q.3) Which one of the following is the objective of 'Unity Utsav', recently organized by the Assam Rifles?
- a) Promote trade between Northeast India and Delhi
- b) Strengthen national identity through sports and culture
- c) Establish new educational institutions in the Northeast
- d) Recruit youth for the Assam Rifles
- Q.4) The Jhumoir dance is primarily associated with which one of the following communities in Assam?
- a) Urban youth
- b) Tea-garden communities
- c) Tribal groups
- d) Religious minorities

Geography

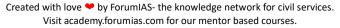
- Q.5) Consider the following statements with respect to Santorini Island:
- 1. It is part of the Cyclades Island group.
- 2. It is located in the Aegean Sea.
- 3. It is a coral atoll.

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
- Q.6) Consider the following statements:
- 1. Marine heatwaves (MHWs) are extreme weather events where the sea surface temperature (SST) rises by 3 to 4 degrees Celsius above the average for at least five consecutive days.
- 2. Increased ocean salinity is one of the common causes of Marine Heatwaves.

Which of the statement(s) given above is/are correct?

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





- Q.7) Which of the following are the causes of increasing temperatures in the North Pole?
- 1. Influx of warm air from lower latitudes
- 2. Increased volcanic activity in the Arctic region
- 3. The albedo effect
- 4. Enhanced solar radiation due to a thinner ozone layer

Select the correct answer using the codes given below:

- a) 1, 2 and 3 only
- b) 1 and 3 only
- c) 2, 3 and 4 only
- d) 2 and 4 only
- Q.8) Which one of the following statements best describes the term 'dunki route'?
- a) A legal migration program for skilled workers to obtain employment visas in developed nations.
- b) A traditional trade route historically used for transporting goods across Central Asia and Europe.
- c) An irregular and illegal migration route used to enter foreign countries without proper documentation.
- d) A diplomatic corridor established for high-level government negotiations between neighbouring countries.
- Q.9) Jogighopa Inland Waterways Terminal (IWT) is situated on which one of the following rivers?
- a) Ganges
- b) Yamuna
- c) Brahmaputra
- d) Godavari
- Q.10) Consider the following statements with respect to the Aravali hills:
- 1. The Aravali hills are a part of the Deccan Plateau uplifted due to tectonic activity.
- 2. It stretches across Rajasthan from Gujarat to near Delhi.
- 3. They combat desertification by checking the spread of the Thar Desert.

How many of the statements given above are correct?

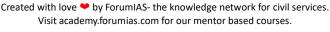
- a) Only one
- b) Only two
- c) All three
- d) None
- Q.11) Consider the following statements:
- 1. Pir Panjal Range is a sub-range of the Greater Himalayas.
- 2. Banihal Pass is located in Pir Panjal Range.
- 3. Apharwat peak is considered the highest peak in the Pir Panjal Range.

How many of the statements given above are correct?

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

Polity

- Q.12) Which one of the following statements about the removal of the Chief Election Commissioner is correct?
- a) Can be removed by the President on recommendation of the Prime Minister
- b) Can be removed through a simple majority vote in Parliament
- c) Can only be removed through impeachment by Parliament
- d) Can be removed by the Supreme Court on grounds of proven misbehaviour





- Q.13) Which of the following statements are correct regarding the differences between Furlough and Parole?
- 1. Parole is granted for specific reasons, such as a death in the family, while furlough is granted to break the monotony of imprisonment.
- 2. The period spent on furlough is counted as part of the sentence, whereas the period spent on parole is not.
- 3. Parole is considered a right of the prisoner, while furlough is a privilege granted upon request.
- 4. Furlough can be granted multiple times without limitations, while parole is limited to once or twice a vear.

Select the correct answer using the codes given below:

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

Q.14) Consider the following statements:

- 1. Ad-hoc judges are retired High Court judges who are temporarily reappointed to help clear pending cases.
- 2. Ad-hoc judges must be part of a Bench led by a sitting judge.

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- Q.15) Which one of the following correctly describes the discretionary powers of the Governor concerning assent to Bills?
- a) The Governor must give assent to all Bills passed by the State Legislature.
- b) The Governor can withhold assent but cannot send a Bill for reconsideration.
- c) The Governor can reserve certain Bills for the President's consideration.
- d) The Governor has no role in the assent process and must follow the Chief Minister's advice.
- Q.16) Which of the following are fundamental procedural rights that must be adhered to before any property acquisition, as per the recent Supreme Court judgment?
- 1. Right to Notice
- 2. Right to Fair Compensation
- 3. Right to Be Heard
- 4. Right to Select the Acquiring Agency
- 5. Right to Veto the Acquisition

Select the correct answer using the codes given below:

- a) 1, 3, 4 and 5 only
- b) 2, 4 and 5 only
- c) 1, 3 and 5 only
- d) 1, 2 and 3 only
- Q.17) Which one of the following best defines 'remission of sentence' in the Indian legal context?
- a) A complete cancellation of a convict's sentence.
- b) A reduction in the duration of a sentence without altering its nature or the conviction itself.
- c) A legal provision that allows courts to revoke a sentence if new evidence emerges.
- d) A temporary suspension of the sentence subject to the convict's behaviour.



Q.18) Under the Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Service, and Term of Office) Act, 2023, who comprises the selection committee for recommending the CEC and ECs to the President?

- a) Prime Minister, Chief Justice of India, and Leader of Opposition in Lok Sabha
- b) Prime Minister, Union Home Minister, and Chief Justice of India
- c) Prime Minister, a Union Cabinet Minister, and Leader of Opposition in Lok Sabha
- d) Prime Minister, a Union Cabinet Minister, and the Speaker of Lok Sabha.

Q.19) Consider the following statements:

- 1. The rarest of rare doctrine in India primarily applies to cases of extreme financial fraud leading to national economic instability.
- 2. The term 'rarest of rare' has not been clearly defined under any statute.

Which of the statement(s) given above is/are correct?

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

Q.20) Consider the following statements regarding the Lokpal:

- 1. It consists of a chairperson and 10 members.
- 2. The President of India appoints the Chairperson and Members of Lokpal.
- 3. The Prime Minister of India does not fall under the jurisdiction of Lokpal.

How many of the statements given above are correct?

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

Q.21) Consider the following statements regarding the President's Rule:

- 1. During President's Rule, the Supreme Court takes over the High Court of the state.
- 2. The President's Rule must be approved by both the Houses of Parliament within two months by a simple majority; otherwise, it expires.
- 3. The President can revoke or modify the proclamation anytime.

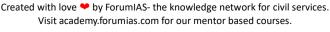
Which of the statement(s) given above is/are correct?

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

Acts & Policies

Q.22) The primary objective of the GARBH-INi-DRISHTI program is to:

- a) Increase fertility rates in India
- b) Predict and prevent preterm birth
- c) Provide subsidies for maternal healthcare
- d) Reduce maternal mortality rates





Q.23) Consider the following statements regarding the Gyan Bharatam Mission:

- 1. It aims to digitize and preserve India's traditional knowledge systems and make them accessible to a global audience.
- 2. AI technologies are employed in the Mission to assist in generating new content based on ancient knowledge systems.

Which of the statement(s) given above is/are correct?

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

Q.24) With reference to the Nuclear Mission, recently announced in the Union Budget 2025-26, consider the following statements:

- 1. It focuses on the development of Fast Breeder Reactors as part of India's strategy to advance clean and efficient nuclear energy technologies.
- 2. It aims to expand the country's nuclear energy capacity to 100 GW by 2047.

Which of the statement(s) given above is/are correct?

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

Q.25) Consider the following statements:

- 1. The Samagra Shiksha Abhiyan (SSA) aims to provide universal access to quality education for children from pre-school to class XII.
- 2. SSA also provides secondary education scholarships to the deserving students.

Which of the statement(s) given above is/are correct?

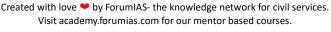
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Q.26) With reference to the Protection of Children from Sexual Offences (POCSO) Act 2012, which of the following statements are correct?

- 1. It aims to protect children from sexual offences and ensure their well-being.
- 2. It applies only to male offenders.
- 3. Under the Act, any sexual act involving a person below 18 years is considered an offence, regardless of consent.

Select the correct answer using the codes given below:

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





- Q.27) With reference to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, consider the following statements:
- 1. It establishes three-tier grievance redressal mechanism.
- 2. Intermediaries are mandated to resolve user grievances within 15 days from the date of receipt.
- 3. Ministry of Electronics and Information Technology is responsible for overseeing the digital media.
- 4. Publishers of news and current affairs content operating in the territory of India must register with the Press Council of India.

Which of the statements given above are correct?

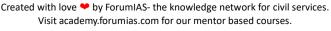
- a) 1 and 4 only
- b) 1, 3 and 4 only
- c) 1 and 2 only
- d) 2 and 4 only
- Q.28) The primary objective of the School of Ultimate Leadership (SOUL) is to:
- a) Regulate international maritime trade.
- b) Provide training for competitive examinations.
- c) Cultivate ethical and effective leadership across various sectors.
- d) Oversee the construction of educational institutions.

International Relations/Organizations

- Q.29) Which one of the following African countries is among the founding members of the International Big Cat Alliance (IBCA)?
- a) Kenya
- b) South Africa
- c) Eswatini
- d) Tanzania
- Q.30) Consider the following statements:
- 1. India and Qatar have signed Double Taxation Avoidance Treaty.
- 2. Qatar has recently become a member of BRICS.

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- Q.31) Which one of the following countries is NOT a member of Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)?
- a) Nepal
- b) Bangladesh
- c) Pakistan
- d) Thailand
- Q.32) Which advanced propulsion technology is being developed collaboratively under the Defence Partnership–India (DP-I) to enhance the capabilities of the Indian Navy?
- a) Integrated full electric propulsion systems
- b) Nuclear propulsion systems
- c) Hybrid diesel-electric engines
- d) Solar-powered propulsion units





- Q.33) With reference to the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), consider the following statements:
- 1. It governs the construction of lighthouses and ports across all coastal nations.
- 2. Its headquarters are located in Paris, France.

Which of the statement(s) given above is/are correct?

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

Economy

- Q.34) With reference to the Agricultural and Processed Food Products Export Development Authority (APEDA), consider the following statements:
- 1. Its main objective is to promote and develop exports of agricultural commodities and processed foods from India.
- 2. It has been established under the Export-Import Bank of India Act, 1981.
- 3. It functions under the Ministry of Commerce and Industry.

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

Q.35) Consider the following:

- 1. Private consumption
- 2. Private investment
- 3. Government expenditure
- 4. Net exports
- 5. Money supply

How many of the following are the sources of demand (expenditure) in an economy?

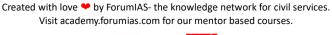
- a) Only two
- b) Only three
- c) Only four
- d) All five

Q.36) Consider the following statements:

- 1. GDP (Gross Domestic Product) is the value added by the production of goods and services.
- 2. According to Keynesian, investment plays an active role in driving economic growth, while consumption is more passive.

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- Q.37) In a U.S. Dollar-Rupee swap auction conducted by the Reserve Bank of India (RBI), participating banks:
- a) Exchange their rupees for dollars with the RBI and agree to buy them back later.
- b) Sell corporate bonds to the RBI in exchange for cash.
- c) Invest in RBI-issued equity instruments for liquidity support.
- d) Receive dollars from the RBI without any repurchase obligation.





Q.38) Diversity, Equity, and Inclusion (DEI) framework was seen in the news recently in the context of:

- a) Promoting fairness and inclusion in workplaces to eliminate discrimination and bias.
- b) Replacing merit-based recruitment with identity-based hiring practices.
- c) Eliminating diversity training programs in educational institutions worldwide.
- d) Mandating quotas for underrepresented groups in all sectors of the economy.

Q.39) Stagflation refers to:

- a) A period of rapid economic growth accompanied by low inflation and low unemployment.
- b) A situation characterized by high inflation, stagnant economic growth, and high unemployment.
- c) An economic condition where only inflation rises while unemployment remains low.
- d) A phase of an economy where deflation and high unemployment occur simultaneously.

Environment

Q.40) With reference to the Dibru-Saikhowa National Park, consider the following statements:

- 1. It is a national park and biosphere reserve located in Assam.
- 2. Subansiri and Dhansiri are two rivers that form the boundaries of park.
- 3. It is the largest salix swamp forest in north-eastern India.

How many of the statements given above are correct?

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

Q.41) With reference to the Marsupials animals, consider the following statements:

- 1. These are a group of mammals that give birth to premature young.
- 2. Africa is home to the most diverse and abundant marsupial populations.
- 3. Kangaroo is an example of marsupial animal.

How many of the statements given above are correct?

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

Q.42) With reference to the Biennial Transparency Report (BTR), consider the following statements:

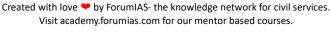
- 1. It offers a platform for countries to share technological innovations in renewable energy.
- 2. Only developing countries are required to submit BTRs.

Which of the statement(s) given above is/are correct?

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

Q.43) Nilgiri tiger is a species of:

- a) Tiger
- b) Snake
- c) Bird
- d) Butterfly





Q.44) Consider the following statements regarding the Parambikulam Tiger Reserve:

- 1. It is located in Kerala.
- 2. It shares its boundaries with the Anamalai Tiger Reserve.
- 3. The Chalakudy River flows through the Parambikulam Tiger Reserve.

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

Q.45) Which one of the following best defines Biochemical Oxygen Demand (BOD)?

- a) The amount of oxygen required for the oxidation of inorganic substances in water
- b) The total oxygen content present in a water body
- c) The amount of dissolved oxygen required by microorganisms to decompose organic matter in water
- d) The oxygen consumed by aquatic plants during photosynthesis

Q.46) With reference to the National Green Tribunal (NGT), consider the following statements:

- 1. National Green Tribunal Act, 2010 established the NGT.
- 2. India is the first developing nation to establish such a tribunal.
- 3. It has the power to create new environmental laws.

How many of the statements given above are correct?

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

Q.47) Consider the following statements with respect to the Carbon Capture and Sequestration (CCS):

- 1. It is the process of capturing carbon dioxide from the atmosphere and converting it into oxygen.
- 2. CCS technology supports both adaptation and mitigation efforts.

Which of the statement(s) given above is/are correct?

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

Q.48) The mass nesting phenomenon of Olive Ridley turtles, known as 'Arribada,' is unique because:

- a) It involves male and female turtles gathering at the shore to build nests.
- b) Thousands of female turtles return to the same beach where they were born to lay eggs.
- c) It occurs only once in a lifetime for each turtle species.
- d) It requires human intervention for the turtles to successfully nest.

Science & Technology

Q.49) Consider the following statements:

- 1. Opioids are drugs that either derive from or mimic substances found in the opium poppy plant.
- 2. Suzetrigine is a non-opioid painkiller that prevents the brain from perceiving pain despite the presence of tissue injury.

Which of the statement(s) given above is/are correct?

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

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- Q.50) 'Gaia BH3' was seen in the news recently, is a:
- a) Newly discovered asteroid in the Kuiper Belt
- b) Supermassive black hole at the centre of the Milky Way
- c) Exoplanet with extreme atmospheric conditions
- d) Stellar-mass black hole in the Milky Way among the largest known

Q.51) Consider the following statements:

- 1. Brucellosis is a viral disease affecting the respiratory system.
- 2. The most common transmission of Brucellosis occurs via unpasteurised milk or cheese from infected

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- Q.52) Which one of the following is correct regarding 'Algorithmic trading'?
- a) It refers to the use of computer programs and algorithms to execute trades at high speed and volume based on pre-defined criteria.
- b) It is a government-mandated system for regulating stock market transactions.
- c) It executes trades randomly to take advantage of unpredictable market fluctuations.
- d) It is a trading strategy that exclusively involves the use of cryptocurrencies.
- Q.53) The primary purpose of the Laser Beam Riding Man Portable Air Defence (LBRM) Very Short-Range Air Defence (VSHORAD) system is to:
- a) Intercept long-range ballistic missiles
- b) Defend against low-altitude aerial threats at short ranges
- c) Provide air-to-air combat capabilities
- d) Conduct long-range reconnaissance missions
- Q.54) Sagittarius A*, seen in the news recently, is:
- a) A newly discovered exoplanet in the Milky Way galaxy.
- b) A supermassive black hole at the center of the Milky Way galaxy.
- c) A star cluster orbiting the Milky Way's central region.
- d) A supernova remnant observed in the Andromeda galaxy.
- Q.55) With reference to the Experimental Advanced Superconducting Tokamak (EAST), consider the following statements:
- 1. It generates solar energy through nuclear fission reactions.
- 2. It is part of the International Thermonuclear Experimental Reactor (ITER) program.

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- Q.56) Which one of the following is correct regarding the Distributed Denial of Service (DDoS) attacks?
- a) A cyberattack that breaches the security perimeter of a target to steal sensitive data.
- b) A single-source attack that floods a target with internet traffic.
- c) A cyberattack that uses legitimate user traffic to disable a network.
- d) A cyberattack that disrupts a target by overwhelming it with internet traffic from multiple sources.





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Q.57) Counter unmanned aerial system (CUAS) technology aims to:

- a) Enhance the flight speed and manoeuvrability of drones for military operations.
- b) Improve the battery life of UAVs to extend their operational range.
- c) Intercept and neutralize unauthorized or hostile drones to prevent security threats.
- d) Develop autonomous navigation systems to make drones completely independent of human control.

Q.58) Which one of the following is correct regarding the Quantum Computing?

- a) Quantum computers use classical transistors but at a much smaller scale to achieve higher speed.
- b) Quantum computing eliminates the need for low temperatures and specialized hardware.
- c) Quantum algorithms always provide exact answers without any probability-based outcomes.
- d) Quantum computers use qubits which can exist in multiple states simultaneously due to superposition.

Q.59) Software-Defined Radios (SDRs) were recently in the news. Their primary purpose is to:

- a) Replace traditional radios with devices that have fixed functionalities.
- b) Enhance maritime security by providing advanced communication capabilities.
- c) Limit the adaptability of radio systems to specific frequency bands.
- d) Reduce the flexibility of radio systems by relying solely on hardware components.

Q.60) With reference to the Quick Reaction Surface-to-Air Missile (QRSAM), consider the following statements:

- 1. It is designed to protect moving armoured formations from aerial threats, offering air defence on the
- 2. Bharat Heavy Electricals Limited (BHEL) is responsible for the development of the QRSAM system in India.

Which of the statement(s) given above is/are correct?

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

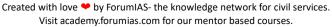
Answer Key

1 - (b)	2 - (b)	3 - (b)	4 - (b)	5 - (a)	6 - (a)	7 – (b)	8 - (c)	9 - (c)	10 - (b)
11 - (a)	12 - (c)	13 - (c)	14 - (c)	15 - (c)	16 - (d)	17 - (b)	18 - (c)	19 - (b)	20 - (a)
21 - (d)	22 - (b)	23 - (a)	24 - (b)	25 - (a)	26 - (c)	27 - (c)	28 - (c)	29 - (c)	30 - (a)
31 - (c)	32 - (a)	33 - (d)	34 - (c)	35 - (c)	36 - (c)	37 - (a)	38 - (a)	39 - (b)	40 - (b)
41 - (b)	42 - (d)	43 - (d)	44 - (a)	45 - (c)	46 - (b)	47 - (b)	48 - (b)	49 - (c)	50 - (d)
51 - (b)	52 - (a)	53 - (b)	54 – (b)	55 – (b)	56 - (d)	57 - (c)	58 - (d)	59 – (b)	60 - (a)

Answers & Explanations

Art & Culture, Ancient and Medieval History

- 1. Correct Answer is (B)
- Statement 1 is incorrect. Sambhaji Maharaj was not given the title of "Maharaja." Instead, like his father Shivaji Maharaj, he was crowned as Chhatrapati, a title signifying "supreme sovereign" or "emperor."





• Statement 2 is correct. Shivaji Maharaj, after his escape from Agra in 1666, maintained a period of relative peace with the Mughals through treaties like the Treaty of Purandar (1665). He focused on consolidating his empire and avoided direct conflicts with the Mughals for some time. In contrast, Sambhaji Maharaj adopted an aggressive stance against the Mughal Empire throughout his reign. He launched attacks on Mughal territories, including the raid on Burhanpur in 1681, and provided refuge to Prince Akbar, Aurangzeb's rebellious son.

Source: The Hindu

- 2. Correct Answer is (B)
- Excavations at Mayiladumparai, located in Krishnagiri district, have provided the earliest confirmed evidence of iron usage in India, dating back to 2172 BCE (approximately 4,200 years ago). Sivagalai has also shown potential evidence of iron use dating as early as 3345 BCE, but these findings are still under analysis and not yet universally accepted as definitive proof of large-scale iron usage.

Source: <u>The Hindu</u>

- 3. Correct Answer is (B)
- The Unity Utsav One Voice, One Nation, organized by Assam Rifles in collaboration with the North East Association Social Welfare, aimed to promote national unity and pride by celebrating the sportsmanship and cultural heritage of Northeast India. The event brought together over 1,000 students from the eight Northeastern states to participate in sports competitions, cultural performances, and traditional music and dance. The festival emphasized the theme of "unity in diversity," fostering a sense of national identity through the celebration of regional traditions and talents.

Source: The Hindu

- 4. Correct Answer is (B)
- The Jhumoir dance is primarily associated with tea-garden communities in Assam. It is a traditional folk dance performed by the tea tribes, often during harvest seasons, festivals, and other celebrations, reflecting their cultural heritage and daily lives.

Source: The Hindu

Geography

- 5. Correct Answer is (A)
- Statements 1 and 2 are correct. Santorini is the southernmost island in the Cyclades group, a collection of islands in the Aegean Sea. Santorini is situated in the southern Aegean Sea, southeast of mainland Greece.
- Statement 3 is incorrect. Santorini is not a coral atoll; it is a volcanic island formed from the remnants of a massive volcanic eruption that created a caldera.

Source: Forum IAS

- 6. Correct Answer is (A)
- Statement 1 is correct. Marine heatwaves (MHWs) are defined as periods when sea surface temperatures (SST) rise by 3 to 4 degrees Celsius for at least five consecutive days.
- Statement 2 is incorrect. Increased ocean salinity is not a common cause of marine heatwaves. Instead, MHWs are primarily driven by atmospheric heat flux (heating from the atmosphere) and ocean currents that transport warm water into a region. Other contributing factors include climate change and natural climate variability like El Niño events.

Source: The Hindu

- 7. Correct Answer is (B)
- The increasing temperatures in the North Pole, a phenomenon known as Arctic amplification, are influenced by factors such as:
- **Influx of warm air from lower latitudes**: This is a significant contributor. Warmer air masses from southern regions are increasingly moving into the Arctic, raising temperatures.

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• **The albedo effect**: This plays a crucial role. As reflective sea ice melts, it exposes darker ocean surfaces that absorb more solar radiation, leading to further warming.

Source: Forum IAS

- 8. Correct Answer is (C)
- The "dunki route" refers to unauthorized migration pathways often used to enter countries illegally, bypassing official immigration channels. It is commonly associated with South Asians attempting to reach Western nations via indirect and risky routes.

Source: Forum IAS

- 9. Correct Answer is (C)
- The Jogighopa Inland Waterways Terminal (IWT) is situated on the Brahmaputra River, which is part of National Waterway-2 (NW-2). It was inaugurated to enhance trade and connectivity in Northeast India and with neighbouring countries like Bhutan and Bangladesh. The terminal is strategically located to facilitate cargo movement and boost regional trade.

Source: The Hindu

- 10. Correct Answer is (B)
- Statement 1 is incorrect. The Aravali Hills are not part of the Deccan Plateau. They are part of the Indian Shield and were formed through tectonic activity during the Proterozoic Era, resulting from the collision of cratons (Bundelkhand and Marwar cratons). They are among the oldest fold mountains in the world.
- Statements 2 and 3 are correct. The Aravali Hills extend diagonally from Gujarat in the southwest to Delhi in the northeast, passing through Rajasthan and Haryana. The range is approximately 692–700 km long. The Aravalis act as a natural barrier, preventing the eastward expansion of the Thar Desert into fertile plains. They also play a role in groundwater recharge and regulating climate patterns in the region.

Source: The Hindu

- 11. Correct Answer is (A)
- Statements 1 and 3 are incorrect. The Pir Panjal Range is part of the Lesser Himalayas, not the Greater Himalayas. It is the largest and westernmost range of the Lesser Himalayan region, forming a natural boundary between the Kashmir Valley and the outer plains. The highest peak is Tatakooti Peak, which rises to an elevation of 4,760 meters.
- Statement 2 is correct. Banihal Pass, also known as Jawahar Tunnel, is located in the Pir Panjal Range. It connects Banihal with Qazigund and serves as an important route between Jammu and Kashmir.

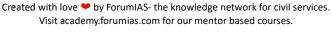
Source: The Hindu

Polity

- 12. Correct Answer is (C)
- The Chief Election Commissioner (CEC) of India can only be removed from office in the same manner and on the same grounds as a judge of the Supreme Court. This involves a process of impeachment, which requires: A resolution passed by both Houses of Parliament with a special majority (two-thirds of the members present and voting, supported by more than 50% of the total strength of the House) and Grounds for removal include proven misbehavior or incapacity.

Source: Forum IAS

- 13. Correct Answer is (C)
- Statements 1 and 2 are correct. Parole is granted for specific emergencies or humanitarian reasons, such as a death or illness in the family. Furlough, on the other hand, is granted periodically to allow prisoners to maintain social ties and relieve the monotony of prison life. The time spent on furlough is considered part of the prison sentence, while the time spent on parole is not.





• Statement 3 and 4 are incorrect. Parole is a privilege granted based on good behavior and circumstances rather than an automatic right. Similarly, furlough is also a privilege, though it serves a different purpose. Furlough is subject to restrictions, including the number of times it can be granted, while parole may also have frequency limits depending on legal provisions.

Source: Forum IAS

- 14. Correct Answer is (C)
- Statements 1 and 2 are correct. Ad-hoc judges are retired High Court judges who are temporarily reappointed under Article 224A of the Indian Constitution to help clear the backlog of pending cases. They are appointed for a limited period and have the same powers as sitting judges during their tenure. Ad-hoc judges must be part of a Bench led by a sitting judge, as per guidelines issued by the Supreme Court to ensure proper functioning and oversight in decision-making.

Source: Forum IAS

- 15. Correct Answer is (C)
- Under Article 200 of the Indian Constitution, the Governor has the discretion to reserve a Bill for the President's consideration if it is deemed to be in conflict with the Constitution or affects the powers of the Union.

Source: Forum IAS

- 16. Correct Answer is (D)
- The SC judgment outlined seven fundamental procedural rights that must be adhered to before any property acquisition is deemed valid:
- **Right to Notice**: The State must inform the property owner about its intent to acquire the land.
- **Right to be Heard**: The owner must be given an opportunity to raise objections.
- **Right to a Reasoned Decision**: The State must provide a detailed explanation for the acquisition.
- **Acquisition Only for Public Purpose**: The government must demonstrate that the acquisition serves a public purpose.
- **Right to Fair Compensation**: The owner is entitled to just and adequate compensation.
- **Right to Efficient Conduct**: The process must be completed within the prescribed timeline.
- **Right to Conclusion**: The acquisition process must lead to a legally valid conclusion.

Source: Forum IAS

- 17. Correct Answer is (B)
- In the Indian legal context, remission of sentence refers to a reduction in the length of a convict's sentence while keeping the conviction and the nature of the punishment unchanged.

Source: The Hindu

- 18. Correct Answer is (C)
- Under the Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service, and Term of Office) Act, 2023, the selection committee for recommending the Chief Election Commissioner (CEC) and Election Commissioners (ECs) to the President comprises: The Prime Minister, A Union Cabinet Minister nominated by the Prime Minister, and the Leader of Opposition in the Lok Sabha (or leader of the largest opposition party if there is no formal Leader of Opposition).

Source: The Hindu

- 19. Correct Answer is (B)
- Statement 1 is incorrect. The rarest of rare doctrine in India is specifically applied in cases involving the death penalty, not financial crimes. It is used to determine whether a crime is so heinous, brutal, or shocking to society's conscience that the death penalty is warranted.
- Statement 2 is correct. The rarest of rare doctrine was established by judicial interpretation in cases like Bachan Singh v. State of Punjab (1980) and Machhi Singh v. State of Punjab (1983). It does not have a statutory definition under any law.

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Source: The Hindu

20. Correct Answer is (A)

- Statements 1 and 3 are incorrect. The Lokpal consists of a chairperson and a maximum of 8 members, not 10. Out of these, at least 50% must be judicial members, and at least 50% must belong to Scheduled Castes, Scheduled Tribes, Other Backward Classes, minorities, or women. The Prime Minister falls under the jurisdiction of Lokpal. However, this is subject to certain exceptions, such as allegations related to international relations, security, public order, atomic energy, and space
- Statement 2 is correct. The Chairperson and Members of Lokpal are appointed by the President of India based on the recommendations of a Selection Committee. This committee includes the Prime Minister (as Chairperson), Speaker of Lok Sabha, Leader of Opposition in Lok Sabha, Chief Justice of India (or a nominated Supreme Court judge), and an eminent jurist.

Source: The Hindu

21. Correct Answer is (D)

- Statement 1 is incorrect. During President's Rule, the judiciary, including the High Court, remains independent and continues to function as usual. The Supreme Court does not assume control over the High Court. Judicial independence is maintained even under President's Rule to safeguard constitutional rights.
- Statements 2 and 3 are correct. Under Article 356, a proclamation of President's Rule must be approved by both the Lok Sabha and Rajya Sabha within two months by a simple majority (i.e., a majority of members present and voting). If not approved, the proclamation ceases to operate. The President has the authority to revoke or modify a proclamation of President's Rule at any time through a subsequent proclamation. This does not require parliamentary approval.

Source: The Hindu

Acts & Policies

22. Correct Answer is (B)

• The GARBH-INi-DRISHTI program, developed under the GARBH-INi initiative by the Department of Biotechnology (DBT), focuses on maternal and child health. Its primary goal is to predict and prevent preterm births through research, data-driven insights, and the development of predictive tools. It is one of the largest maternal and child health databases in South Asia. The GARBH-INi-DRISHTI project is led by the Translational Health Science and Technology Institute (THSTI).

Source: Forum IAS

23. Correct Answer is (A)

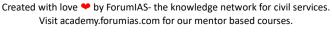
- Statement 1 is correct. The Gyan Bharatam Mission focuses on the survey, documentation, conservation, and digitization of India's vast manuscript heritage. It aims to create a National Digital Repository of Indian Knowledge Systems, making ancient manuscripts accessible globally for research, education, and public knowledge.
- Statement 2 is incorrect. AI technologies are employed in the Gyan Bharatam Mission to assist in cataloging, organizing, and making the digitized content more accessible and searchable.

Source: Forum IAS

24. Correct Answer is (B)

- Statement 1 is incorrect. The Nuclear Energy Mission, in the Union Budget 2025-26, emphasizes the development of Small Modular Reactors (SMRs) rather than Fast Breeder Reactors. The government has allocated ₹20,000 crore for research and development in SMRs, targeting at least five indigenously designed operational SMRs by 2033.
- Statement 2 is correct. The mission sets an ambitious target to expand India's nuclear power capacity to 100 GW by 2047, positioning nuclear energy as a cornerstone of the country's energy mix.

Source: Forum IAS





25. Correct Answer is (A)

- Statement 1 is correct. The Samagra Shiksha Abhiyan (SSA) is a flagship program launched in 2018
 that integrates three schemes—Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha
 Abhiyan (RMSA), and Teacher Education (TE). It aims to provide inclusive and equitable quality
 education from pre-school to Class XII, ensuring universal access, retention, and improved learning
 outcomes.
- Statement 2 is incorrect. SSA primarily supports infrastructure development, teacher training, digital initiatives, and vocational education but does not include scholarships as a direct component.

Source: The Hindu

26. Correct Answer is (C)

- Statements 1 and 3 are correct. The Protection of Children from Sexual Offences (POCSO) Act, 2012, was enacted to safeguard children from sexual assault, harassment, and exploitation. It provides a robust legal framework to ensure the safety and well-being of children during judicial processes. The POCSO Act defines a child as anyone below 18 years of age and criminalizes any sexual activity involving minors, irrespective of consent. This is based on the legal presumption that minors cannot give valid consent due to their age.
- Statement 2 is incorrect. The POCSO Act is gender-neutral. It applies to all offenders, regardless of gender, and protects all children (male, female, or others) under the age of 18 from sexual offences.

Source: The Hindu

27. Correct Answer is (C)

- Statements 1 and 2 are correct. The IT Rules, 2021 mandate a three-tier grievance redressal mechanism for digital media and OTT platforms: Level I: Self-regulation by the publisher, Level II: Self-regulatory body of publishers, Level III: Oversight by the Ministry of Information and Broadcasting (MIB). As per the IT Rules, intermediaries must acknowledge complaints within 24 hours and resolve them within 15 days.
- Statements 3 and 4 are incorrect. The Ministry of Electronics and Information Technology (MeitY) oversees social media intermediaries, while the Ministry of Information and Broadcasting (MIB) oversees digital media and OTT platforms. Digital news publishers are not required to register with the Press Council of India. Instead, they must furnish information about their operations to the Ministry of Information and Broadcasting.

Source: The Hindu

28. Correct Answer is (C)

• SOUL focuses on nurturing leaders with integrity, excellence, and altruism to address complex challenges in governance, business, public policy, and social service. It aims to develop leaders who can contribute to societal progress and India's development. The School of Ultimate Leadership (SOUL) is an emerging institution in Gandhinagar, Gujarat, dedicated to cultivating ethical and effective leadership across various sectors.

Source: AIR

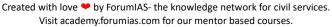
International Relations/Organizations

29. Correct Answer is (C)

• Eswatini is one of the founding members of the International Big Cat Alliance (IBCA), alongside India, Nicaragua, and Somalia. The IBCA is a global initiative launched by India in April 2023 to conserve seven big cat species: Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma. It aims to foster international collaboration for big cat conservation and habitat protection.

Source: Forum IAS

30. Correct Answer is (A)





- Statement 1 is correct. India and Qatar signed a revised agreement for the avoidance of double taxation and prevention of fiscal evasion with respect to taxes on income. This treaty aims to streamline tax structures, prevent fiscal evasion, and enhance economic cooperation between the two nations.
- Statement 2 is incorrect. Qatar is not a member of BRICS. The recent expansion of BRICS in January 2025 included nine new partner countries—Belarus, Bolivia, Indonesia, Kazakhstan, Cuba, Malaysia, Thailand, Uganda, and Uzbekistan.

Source: The Hindu

- 31. Correct Answer is (C)
- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization comprising seven member countries from South Asia and Southeast Asia. These are: Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar, and Thailand.

Source: The Hindu

- 32. Correct Answer is (A)
- The Integrated Full Electric Propulsion (IFEP) system is being collaboratively developed under the Defence Partnership–India (DP-I) between India and the United Kingdom. This advanced propulsion technology is intended for India's next-generation Landing Platform Dock (LPD) fleet, with a focus on enhancing energy efficiency, reducing environmental impact, and improving operational capabilities.

Source: The Hindu

- 33. Correct Answer is (D)
- Statements 1 and 2 are incorrect. The IALA provides technical guidance, standards, and recommendations for marine aids to navigation, such as buoys, beacons, and lighthouses, to ensure maritime safety and efficiency. The actual construction and management of lighthouses are the responsibility of individual nations. IALA's headquarters are located in Saint-Germain-en-Laye, France.

Source: AIR

Economy

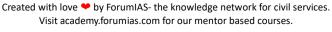
- 34. Correct Answer is (C)
- Statements 1 and 3 are correct. The Agricultural and Processed Food Products Export Development Authority (APEDA) was established to promote the export of agricultural and processed food products from India, as per the APEDA Act of 1985. APEDA operates under the Ministry of Commerce and Industry, Government of India.
- Statement 2 is incorrect. PEDA was established under the Agricultural and Processed Food Products Export Development Authority Act, 1985, which came into effect in 1986.

Source: Forum IAS

35. Correct Answer is (C)

- **Private consumption:** Private consumption refers to spending by households on goods and services. It is a key component of aggregate demand.
- **Private investment:** Private investment includes spending by businesses on capital goods like machinery, equipment, and infrastructure. This contributes to aggregate demand.
- **Government expenditure:** Government spending on infrastructure, public goods, and services directly contributes to aggregate demand in the economy.
- **Net exports:** Net exports (exports minus imports) represent foreign demand for domestically produced goods and services. A positive net export value adds to aggregate demand.
- Money supply: Money supply refers to the total amount of money circulating in an economy. While
 it influences purchasing power and credit availability, it is not directly considered a source of
 expenditure or demand.

Source: The Hindu





36. Correct Answer is (C)

• Statements 1 and 2 are correct. GDP represents the total monetary value of all final goods and services produced within a country's borders in a specific time period. It is calculated as the sum of value added at every stage of production, which includes the output of producers minus the value of intermediate goods consumed in production. In Keynesian economics, investment is considered a volatile and active driver of economic growth because it depends on factors like interest rates and business expectations. On the other hand, consumption is viewed as a stable and passive function, primarily determined by current income levels.

Source: The Hindu

37. Correct Answer is (A)

• In a U.S. Dollar-Rupee swap auction conducted by the Reserve Bank of India (RBI): Banks sell U.S. dollars to the RBI in exchange for rupees at the current exchange rate (spot rate). Simultaneously, they agree to repurchase the same amount of dollars from the RBI at a future date by paying a premium over the spot rate. This mechanism is designed to inject rupee liquidity into the banking system while ensuring that the dollars are returned to the banks after the swap period. A buy/sell swap (RBI buys foreign currency and sells it later) injects rupee liquidity into the system, whereas a sell/buy swap (RBI sells foreign currency and buys it back later) absorbs excess rupee liquidity.

Source: The Hindu

38. Correct Answer is (A)

• The Diversity, Equity, and Inclusion (DEI) framework focuses on creating fair and inclusive workplaces by addressing discrimination and bias. It ensures that people from different backgrounds get equal opportunities, fair treatment, and the support they need to succeed.

Source: The Hindu

39. Correct Answer is (B)

• Stagflation combines stagnation (slow economic growth) with inflation (rising prices) and elevated unemployment, making it a challenging economic condition to address.

Source: The Hindu

Environment

40. Correct Answer is (B)

- Statements 1 and 3 are correct. Dibru-Saikhowa is both a National Park and a Biosphere Reserve
 located in the Dibrugarh and Tinsukia districts of Assam, India. It was designated as a Biosphere
 Reserve in 1997 and a National Park in 1999. Dibru-Saikhowa National Park is recognized as the
 largest salix swamp forest in northeastern India.
- Statement 2 is incorrect. The park is bounded by the Brahmaputra and Lohit rivers in the north and the Dibru River in the south.

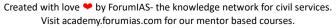
Source: Forum IAS

41. Correct Answer is (B)

- Statements 1 and 3 are correct. Marsupials are characterized by giving birth to relatively underdeveloped offspring. These premature young then continue their development in the mother's pouch (marsupium) for an extended period after birth. Kangaroos are one of the most well-known examples of marsupials. They are native to Australia and exhibit the characteristic marsupial trait of carrying their young in a pouch.
- Statement 2 is incorrect. Marsupials are primarily found in Australia, Tasmania, New Guinea, and the Americas. Africa is not a significant habitat for marsupials.

Source: Forum IAS

42. Correct Answer is (D)





• Statements 1 and 2 are incorrect. The Biennial Transparency Report (BTR) is primarily a reporting mechanism under the Paris Agreement's Enhanced Transparency Framework. It focuses on providing information about greenhouse gas (GHG) emissions, progress toward Nationally Determined Contributions (NDCs), and other climate-related actions, such as mitigation and adaptation. All Parties to the Paris Agreement are required to submit BTRs, including both developed and developing countries. However, Small Island Developing States (SIDS) and Least Developed Countries (LDCs) have the flexibility to submit BTRs at their discretion due to capacity constraints.

Source: The Hindu

43. Correct Answer is (D)

• The Nilgiri tiger (Parantica nilgiriensis) is a butterfly species endemic to the Western Ghats of India. It belongs to the family Nymphalidae and is part of the danaid group of brush-footed butterflies. It thrives in high-altitude shola forests and plays an important role in the ecosystem.

Source: The Hindu

44. Correct Answer is (A)

- Statements 1 and 2 are correct. The Parambikulam Tiger Reserve is situated in the Palakkad district of Kerala. The Parambikulam Tiger Reserve shares its boundaries with the Anamalai Tiger Reserve in Tamil Nadu, forming part of a larger contiguous forest landscape in the Western Ghats.
- Statement 3 is incorrect. The Parambikulam River, which is a tributary of the Chalakudy River, flows through the reserve. However, the Chalakudy River itself does not flow through the Parambikulam Tiger Reserve.

Source: The Hindu

45. Correct Answer is (C)

• Biochemical Oxygen Demand is an analytical parameter that measures the amount of dissolved oxygen (DO) consumed by aerobic bacteria as they break down organic matter in water.

Source: The Hindu

46. Correct Answer is (B)

- Statements 1 and 2 are correct. The NGT was established under the National Green Tribunal Act, 2010, which provides for its creation to handle environmental disputes efficiently and expeditiously. India became the first developing nation and the third country globally (after Australia and New Zealand) to establish a specialized environmental tribunal.
- Statement 3 is incorrect. The NGT does not have legislative powers to create new laws. It is a statutory body that adjudicates cases under existing environmental laws listed in Schedule I of the NGT Act, such as the Water Act, Air Act, and Environment Protection Act.

Source: The Hindu

47. Correct Answer is (B)

- Statement 1 is incorrect. Carbon Capture and Sequestration (CCS) involves capturing carbon dioxide (CO2) emissions from industrial sources or directly from the atmosphere, transporting it, and storing it in long-term storage locations such as geological formations. It does not involve converting CO2 into oxygen.
- Statement 2 is correct. CCS plays a dual role in climate change efforts: Mitigation: By reducing CO2
 emissions from industries and power plants, CCS helps slow global warming and Adaptation: It
 supports technologies like hydrogen production and bioenergy, aiding energy transitions in hardto-decarbonize sectors.

Source: The Hindu

48. Correct Answer is (B)

• The mass nesting phenomenon of Olive Ridley turtles, known as Arribada, is unique because thousands of female turtles come together on specific beaches to lay their eggs. These turtles

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exhibit a remarkable behaviour where they return to the very beaches where they were born to nest in large numbers.

Source: The Hindu

Science & Technology

49. Correct Answer is (C)

• Statements 1 and 2 are correct. Opioids include natural, semi-synthetic, and synthetic chemicals that interact with opioid receptors in the body, and they either derive from or mimic substances found in the opium poppy plant. Suzetrigine is a non-opioid analgesic that works by selectively inhibiting the NaV1.8 pain-signalling pathway in the peripheral nervous system, blocking pain signals before they reach the brain.

Source: Forum IAS

50. Correct Answer is (D)

• Gaia BH3 is the largest known stellar-mass black hole in the Milky Way, with a mass approximately 33 times that of the Sun. It was discovered using the Gaia telescope and is located in the constellation Aquila, about 2,000 light-years away from Earth. This discovery enhances our understanding of black hole formation and galactic evolution.

Source: AIR

51. Correct Answer is (B)

- Statement 1 is incorrect. Brucellosis is not a viral disease; it is caused by Brucella bacteria, which are gram-negative bacteria. Additionally, it does not affect the respiratory system. Instead, brucellosis causes systemic symptoms such as fever, joint pain, fatigue, and muscle aches, and it can affect various organs depending on the severity of the infection.
- Statement 2 is correct. The most common transmission of brucellosis occurs through the consumption of unpasteurized milk or cheese made from infected animals. Other modes of transmission include direct contact with infected animal tissues or fluids and inhalation of contaminated aerosols, but unpasteurized dairy products are the primary source.

Source: Forum IAS

52. Correct Answer is (A)

Algorithmic trading, also known as algo trading or automated trading, involves using computer
programs and algorithms to execute trades at high speed and volume. These programs follow predefined criteria such as price, volume, timing, or other market conditions, ensuring efficiency and
precision.

Source: Forum IAS

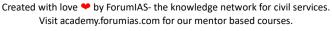
53. Correct Answer is (B)

• The Laser Beam Riding Man Portable Air Defence (LBRM) Very Short-Range Air Defence (VSHORAD) system is specifically designed as a short-range, man-portable air defence solution. It is optimized to counter low-altitude threats such as drones, helicopters, and fixed-wing aircraft that bypass long-range air defence systems and approach at close range. The LBRM system is a man-portable air defence system (MANPADS) that uses laser beam riding technology to guide missiles toward their target. The LBRM VSHORAD system being supplied to India is based on the StarStreak missile system developed by Thales U.K. It is being manufactured in collaboration with Bharat Dynamics Limited (BDL) under the Make in India initiative, with up to 60% indigenous content.

Source: The Hindu

54. Correct Answer is (B)

• Sagittarius A* (Sgr A*) is a supermassive black hole located at the center of the Milky Way galaxy, approximately 26,000 light-years from Earth. It has a mass about 4 million times that of the Sun





and was recently in the news due to observations made by NASA's James Webb Space Telescope, which studied the chaotic activity in its surrounding accretion disk.

Source: The Hindu

55. Correct Answer is (B)

- Statement 1 is incorrect. EAST is based on nuclear fusion, not fission. It aims to replicate the fusion process that powers the Sun, where hydrogen nuclei fuse to form helium, releasing vast amounts of energy. Fission, on the other hand, involves splitting heavy atomic nuclei (e.g., uranium) and is used in current nuclear reactors.
- Statement 2 is correct. EAST is part of the ITER program. China joined ITER in 2003, and EAST serves as a testbed for ITER technologies, contributing to research on steady-state plasma operations and advanced tokamak designs.

Source: The Hindu

56. Correct Answer is (D)

• A Distributed Denial of Service (DDoS) attack is designed to overwhelm a target (server, network, or service) with excessive internet traffic originating from multiple compromised systems (botnets). This disrupts the normal functioning of the target, rendering it inaccessible.

Source: The Hindu

57. Correct Answer is (C)

 Counter-Unmanned Aerial System (CUAS) technology is designed to detect, track, intercept, and neutralize unauthorized or hostile drones that pose security risks. This technology is used to protect critical infrastructure, military installations, public events, and restricted airspace from drone-related threats.

Source: The Hindu

58. Correct Answer is (D)

Qubits can exist in a superposition of states (both 0 and 1 simultaneously), enabling quantum
computers to perform complex calculations much faster than classical computers. Microsoft has
recently introduced a new chip called Majorana 1, which it claims brings quantum computing
closer to reality.

Source: The Hindu

59. Correct Answer is (B)

• SDRs enable secure, high-speed data exchange and encrypted voice communication, improving situational awareness and operational coordination for maritime law enforcement, search and rescue, and other critical missions of the Indian Coast Guard. They also improve interoperability for joint operations with the Indian Navy.

Source: The Hindu

60. Correct Answer is (A)

- Statement 1 is correct. The Quick Reaction Surface-to-Air Missile (QRSAM) system is specifically designed to protect moving armoured columns from aerial threats. It has the capability to provide air defence on the move, with features like "Search on Move," "Track on Move," and "Fire on Short Halts".
- Statement 2 is incorrect. The QRSAM system was developed by the Defence Research and Development Organisation (DRDO) in collaboration with Bharat Electronics Limited (BEL) and Bharat Dynamics Limited (BDL).

Source: The Hindu

