INDEX

Modern Indian History	
Geography	
Polity	
Acts & Policies	
Index & Reports	
International Relations/Organizations	
Economy	
Environment	10
Science & Technology	11
Answer Key	14
Answers & Explanations	14



Modern Indian History

Q.1) Consider the following statements:

- 1. The practice of sati first emerged in India during the Vedic period.
- 2. Lord William Bentinck was the British Governor-General who officially banned sati.

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

Geography

Q.2) Which one of the following regions extends from the east coast of Africa to the west coast of the Americas?

- a) Indian Ocean Region (IOR)
- b) Indo-Pacific Region (IPR)
- c) Atlantic Ocean Region (AOR)
- d) Pacific Ocean Region (POR)

Q.3) Consider the following statements:

- 1. Slag is a waste product from steelmaking.
- 2. Lithification is the process of breaking down rocks into smaller particles.

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.4) Which one of the following dams on the Krishna River is known for being one of the largest and serving both irrigation and hydroelectric purposes?

- a) Hirakud Dam
- b) Srisailam Dam
- c) Nagarjuna Sagar Dam
- d) Tehri Dam

Q.5) Consider the following statements:

- 1. An atoll is a barrier reef along a continental coastline.
- 2. The Chagos Islands contain the world's largest coral atoll.

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.6) Northern Sea Route (NSR) is:

- a) A maritime route connecting the Atlantic Ocean with the Mediterranean Sea through the Arctic.
- b) A strategic naval corridor through the Bering Strait used exclusively for military purposes.
- c) A shipping lane that runs along the coast of Antarctica, facilitating trade between southern continents.
- d) A shipping route along Russia's Arctic coast, connecting the Atlantic and Pacific Oceans

Polity

Q.7) With reference to the National Company Law Tribunal (NCLT), consider the following statements:

- 1. It handles criminal cases related to companies.
- 2. It is a regulatory body responsible for overseeing compliance with industry standards and enforcing legal regulations.
- 3. Its decisions can be appealed to the National Company Law Appellate Tribunal (NCLAT).

How many of the statements given above are correct?

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

Q.8) Which one of the following is correct regarding the relationship between the Governor and the High Court?

- a) The Governor has no role in the appointment of judges of the High Court
- b) The Governor is consulted for the appointment of judges of the High Court
- c) The Governor appoints judges of the High Court
- d) The Governor can remove judges of the High Court

Q.9) 'Black Coat Syndrome', sometimes seen in the news, refers to:

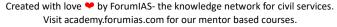
- a) The hesitation of individuals to approach courts due to the fear of lengthy litigation processes, increasing costs, and frequent delays
- b) A medical condition caused by the prolonged use of air conditioning in offices, leading to respiratory issues
- c) A strategy used by senior lawyers to delay cases by frequently requesting adjournments
- d) A phenomenon where certain bacteria grow more rapidly on dark-colored surfaces, such as black coats, under specific environmental conditions

Q.10) With reference to the National Commission for Protection of Child Rights (NCPCR), consider the following statements:

- 1. It regulates child labour laws in India.
- 2. It derives its mandate from the Constitution of 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





Q.11) With reference to the President's rule, consider the following statements:

- 1. It can be imposed under Article 356 of the Constitution of India.
- 2. During President's rule, the state's legislative assembly is dissolved automatically.
- 3. The President assumes the executive authority of the state during President's rule.

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.12) Consider the following statements:

- 1. National or state-recognized political parties have reserved symbols that cannot be used by any other candidate in any constituency.
- 2. According to the Symbols Order 1968, when a recognized political party splits, the Supreme Court of India decides which faction is officially recognized and assigns them the reserved symbol.

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.13) With reference to Bureau of Indian Standards (BIS), which of the following statement(s) is/are correct?

- 1. Green Certification Scheme and Circular Economy Compliance Scheme are the two main product certification schemes offered by BIS.
- 2. The Union Minister of Consumer Affairs serves as its President.

Select the correct answer using the codes given below:

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

Q.14) Consider the following statements:

- 1. The right to strike is fundamental right implicit under Article 21 of the Indian Constitution.
- 2. In India, the collective bargaining process carried out by employees of a company is recognized by law.

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

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

Q.15) Consider the following statements:

- 1. The President of India appoints the Chief Election Commissioner and other Election Commissioners.
- 2. The Election Commission is bound by the directives of the ruling government.
- 3. The delimitation of constituencies is handled by the Election Commission of India.

How many of the statements give above are correct?

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



Q.16) Consider the following statements with reference to the Indian Parliament:

- 1. The Speaker must consult the Election Commission before deciding on a disqualification due to defection.
- 2. The Speaker can be part of cabinet meetings.
- 3. The Public Accounts Committee examines the expenditure of the government to ensure it is in line with the appropriations approved by Parliament.

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

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

Q.17) Consider the following statements:

- 1. In India, the executive is part of the legislature, while in the US, the executive is separate from the legislature.
- 2. The President of the US is elected directly by its citizens.

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

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

Acts & Policies

Q.18) With reference to the PM Gati Shakti National Master Plan (PMGS-NMP), which of the following statements are correct?

- 1. Geographic Information System (GIS) forms the core of the PM Gati Shakti National Master Plan.
- 2. It has improved India's logistics performance in the World Bank's Logistics Performance Index Report 2023.
- 3. It replaced the National Infrastructure Pipeline (NIP).

Select the correct answer using the codes give below:

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

Q.19) Consider the following statements:

- 1. The primary objective of Eklavya Model Residential Schools (EMRS) is to promote urban education in India.
- 2. EMRS provide education from secondary to higher secondary levels.

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

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



Index & Reports

Q.20) Which one of the following annual reports is published by United Nations Population Fund (UNFPA) to raise awareness of population issues?

- a) Global Human Development Report
- b) World Population Review
- c) State of World Population Report
- d) Annual Demographic Survey

International Relations/Organizations

Q.21) With reference to the Mindfulness India Summit, consider the following statements:

- 1. It focuses on advancing the understanding and application of mindfulness and emotional intelligence in personal and professional areas.
- 2. Artificial intelligence is one of the focus areas of the Summit.
- 3. The World Trade Organization has recognized mindfulness as an important skill for achieving sustainable goals and success in leadership.

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

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

0.22) Consider the following statements regarding the World Health Organization (WHO):

- 1. The primary objective of WHO is to eradicate all diseases globally.
- 2. It's headquartered at Geneva, Switzerland.
- 3. India is the largest financial contributor to WHO from the Southeast Asia region.

How many of the statements given above are correct?

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

Q.23) Consider the following statements:

- 1. The World Telecommunication Standardization Assembly (WTSA) serves as the primary governing conference for the International Telecommunication Union Telecommunication Standardization Sector (ITU-T).
- 2. The role of member states in the World Telecommunication Standardization Assembly (WTSA) is to vote on new telecom market prices.

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 Global Digital Compact (GDC), consider the following statements:

- 1. It aims to establish a comprehensive framework for the governance of digital technologies and artificial intelligence.
- 2. It emphasizes that access to the internet is a fundamental human right.
- 3. The United Nations (UN) proposed the GDC.
- 4. It advocates replacing Sustainable Development Goals (SDGs) with digital goals.

Which of the statements given above are correct?

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

Q.25) Consider the following statements:

- 1. The ASEAN-India Summit serves as a platform to enhance cooperation across various domains, reflecting India's commitment to its Act East Policy.
- 2. The East Asia Summit comprises all Asian and Pacific countries.

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 Association of Southeast Asian Nations (ASEAN), consider the following statements:

- 1. ASEAN Charter is a legal and institutional framework for ASEAN.
- 2. Among the ASEAN countries, Japan has the largest population.
- 3. India has planned to share its expertise in Digital Public Infrastructure (DPI) with ASEAN.

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.27) Consider the following:

- 1. India-Myanmar-Thailand Trilateral Highway
- 2. Kaladan Multi-Modal Transit Transport Project
- 3. Bangladesh-China-India-Myanmar (BCIM) Economic Corridor
- 4. Trans-Siberian Railway

How many of the above infrastructure projects are associated with India's Act East Policy?

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



Q.28) Consider the following statements regarding the Shanghai Cooperation Organisation (SCO):

- 1. 'Shanghai Spirit' is a cultural exchange program between member states.
- 2. Council of Foreign Ministers serves as the supreme decision-making authority in the SCO.
- 3. It is the world's largest regional organization in terms of geographic scope and population.

How many of the statements give above are correct?

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

Q.29) With reference to Inter-Parliamentary Union (IPU), consider the following statements:

- 1. It is the global organization of national Parliaments.
- 2. Its headquarters are in Geneva, Switzerland.
- 3. It is a subsidiary organ of the UN General Assembly.

Which of the statements give above are correct?

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

Economy

Q.30) In this agricultural practice, traditional farming techniques are combined with advanced technologies to cultivate, produce, and market flowers and ornamental plants. Which one of the following agricultural practices is referred to here?

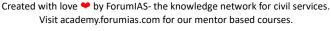
- a) Floriculture
- b) Hydroponics
- c) Olericulture
- d) Aeroponics

Q.31) Which one of the following consequences is likely to occur when the Reserve Bank of India decides to cut the policy repo rate?

- a) Increase in Savings Interest Rates
- b) Decrease in Consumer Spending
- c) Appreciation of the National Currency
- d) Stimulation of Economic Growth

Q.32) Which one of the following statements is correct?

- a) UPI123 targets smartphone users, while UPI Lite targets feature phone users
- b) UPI123 targets feature phone users, while UPI Lite targets smartphone users
- c) UPI123 uses an on-device wallet, while UPI Lite directly accesses bank accounts
- d) UPI Lite has higher transaction limits than UPI123





Q.33) Consider the following statements regarding the National Maritime Heritage Complex (NMHC):

- 1. It will establish a new shipping port to enhance trade connectivity, boost regional commerce, and support maritime logistics infrastructure.
- 2. It will also have Asia's biggest underwater marine museum.

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.34) Consider the following statements:

- 1. Wholesale Price Index (WPI) is primarily used to measure retail inflation.
- 2. A neutral monetary policy stance neither stimulates nor restrains economic growth.

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.35) Consider the following statements:

- 1. Central Bank Digital Currency (CBDC) can be implemented without blockchain technology.
- 2. Central Bank Digital Currency (CBDC) are decentralized while cryptocurrencies are centralized.

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.36) Consider the following statements:

Statement-I: The gig economy contributes significantly to the Indian gross domestic product (GDP).

Statement-II: Gig workers in India are involved in various sectors, including

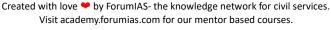
transportation, delivery, and freelancing.

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

Q.37) Which one of the following was a key technological advancement introduced during the Green Revolution in India?

- a) Use of genetically modified organisms (GMOs)
- b) Introduction of high-yielding varieties (HYVs) of seeds
- c) Large-scale mechanization of agriculture
- d) Widespread organic farming techniques





Environment

Q.38) Consider the following statements:

- 1. Red pandas are found in the mountain forests of the Himalayas.
- 2. Red pandas are nocturnal animals.
- 3. Red pandas are classified Vulnerable on the International Union for Conservation of Nature (IUCN) Red Data List.
- 4. Padmaja Naidu Himalayan Zoological Park (Darjeeling zoo) is the only zoo in India where red pandas can be found.

How many of the statements given above are correct?

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

Q.39) Consider the following:

- 1. Seed dispersal
- 2. Insect consumption
- 3. Decomposing dead material
- 4. Pollination

How many of the above roles are played by birds in an ecosystem?

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

Q.40) Consider the following statements regarding the Graded Response Action Plan (GRAP):

- 1. Based on the Air Quality Index (AQI), there are total three stages of GRAP.
- 2. It is an emergency response activated based on AQI levels.
- 3. Central Pollution Control Board (CPCB) is responsible for implementing the GRAP.

How many of the statements given above are correct?

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

Q.41) Which one of the following is the primary role of nitrifying bacteria in the nitrogen cycle?

- a) Converting nitrates back to atmospheric nitrogen
- b) Converting ammonia to nitrites and then nitrates
- c) Breaking down organic matter to release ammonia
- d) Fixing atmospheric nitrogen into ammonia

Q.42) Consider the following statements:

- 1. Carbon capture and storage (CCS) from industrial sources is one of the methods of Carbon Dioxide Removal (CDR) from air.
- 2. Carbon Dioxide (CO2) removal from air cannot reverse all the damage caused by climate change.

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) Consider the following statements:

- 1. Sugarcane is the primary source of ethanol production in India.
- 2. Montreal Protocol supports the use of biofuels like ethanol to combat climate change.
- 3. India has achieved the target of 20 percent ethanol blending with petrol.

How many of the statements given above are correct?

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

Q.44) Consider the following statements:

- 1. Tree rings primarily indicate the age of a tree.
- 2. Tree rings are most visible in tropical climate.
- 3. Tree rings are only composed of water vessels.

Which of the statements given above are correct?

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

Science & Technology

Q.45) Consider the following statements:

- 1. The Space Debris Mitigation Guidelines aims to regulate the commercial use of space.
- 2. Inter-Agency Space Debris Coordination Committee (IADC) is an international forum that focuses on the principles of space debris mitigation for Earth-orbiting vehicles.

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.46) Consider the following:

- 1. Image and Speech Recognition
- 2. Natural Language Processing (NLP)
- 3. Financial Forecasting
- 4. Healthcare

In how many of the above do Artificial Neural Network (ANN) technology find applications?

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



Q.47) Consider the following statements:

- 1. Trachoma is a viral infection that affects the lungs.
- 2. India has successfully eliminated trachoma.

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) With reference to the Nobel Prize, consider the following statements:

- 1. There are six Nobel Prizes awarded annually.
- 2. The Nobel Prize in Chemistry for 2024 recognized advancements in battery technology.
- 3. The United Nations General Assembly is not involved in awarding any of the Nobel Prizes.

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.49) Which of the following countries are the permanent participants in the Malabar exercise?

- a) India, Japan, Australia, and South Korea
- b) India, Japan, Australia, and the United States
- c) India, Japan, China, and the United States
- d) India, Japan, Australia, and Russia

0.50) Consider the following statements:

- 1. India has indigenously manufactured nuclear-powered ballistic missile submarines (SSBN).
- 2. The nuclear-powered attack submarines (SSNs) are a critical requirement for the Indian Navy as they give unlimited endurance to perform a variety of tasks.

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.51) The primary purpose of rice fortification is to:

- a) Improve the taste of rice
- b) Increase rice production
- c) Enhance the nutritional quality of rice
- d) Extend the shelf life of rice

Q.52) With reference to the Tele Mental Health Assistance and Networking Across States (Tele-MANAS) initiative, consider the following statements:

- 1. It aims to improve access to quality mental health services across the country.
- 2. The All-India Institute of Medical Sciences (AIIMS), Delhi serves as the nodal center for the programme.

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.53) Auroras, typically seen in high-latitude regions, were recently seen in Ladakh. The appearance of auroras at lower latitudes like Ladakh suggests:

- a) Increase in light pollution in Ladakh
- b) Gradual shift in the magnetic poles of Earth
- c) Increased solar activity
- d) Decrease in the Earth's geomagnetic field strength

Q.54) Consider the following statements:

- 1. Biobanks are repositories that store biological samples like blood, DNA, cells, tissues, and organs, along with their genetic data.
- 2. Currently, there are no laws or guidelines in India that regulate biobanks.

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

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

Q.55) Consider the following:

- 1. Gene Editing
- 2. mRNA Therapeutics
- 3. Organ-on-Chips

How many of the above technologies are important for precision medicine?

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

Q.56) Consider the following statements:

- 1. X-band radar has longer wavelength that the Doppler radar.
- 2. Both X-band and Doppler radars can be used to monitor weather conditions.

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.57) The primary function of the Terminal High Altitude Area Defense (THAAD) system is to:

- a) Intercept and destroy ground targets
- b) Intercept ballistic missiles during their final phase of flight
- c) Launch offensive missiles against enemy targets
- d) Provide early warning systems for incoming missiles

Q.58) The primary purpose of India's eMigrate portal is to:

- a) Promote tourism to India
- b) Facilitate immigration to India
- c) Safeguard Indian workers emigrating abroad
- d) Manage internal migration within India



Q.59) Consider the following statements:

Statement-I: India is currently facing a severe shortage of organs for transplants.

Statement-II: India has one of the lowest rates of deceased organ donation 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 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

Q.60) Which one of the following best describes the MQ-9B drone?

- a) A short-range reconnaissance aircraft
- b) A high-altitude, long-endurance armed unmanned aerial vehicle
- c) A manned combat aircraft
- d) A low-altitude surveillance helicopter

Answer Key

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

Answers & Explanations

Modern Indian History

1. Correct Answer is (B)

- Statement 1 is incorrect. The practice of sati first emerged under the Gupta Empire's dominance, which lasted from 320 to 550 CE.
- Statement 2 is correct. Lord William Bentinck was the Governor-General of India who formally banned the practice of sati through the Bengal Sati Regulation in 1829, making it illegal and punishable by law.

Source: The Hindu

Geography

2. Correct Answer is (B)

• The Indo-Pacific Region is generally described as extending from the eastern coast of Africa to the western coast of the Americas. This broad geographical area includes parts of the Indian and Pacific Oceans, highlighting its strategic importance for global trade and security.

Source: The Hindu



3. Correct Answer is (A)

- Statement 1 is correct. Slag is a byproduct of the steelmaking process. It is formed during the separation of molten steel from impurities in steel-making furnaces and consists of various minerals and oxides. It contains metal oxides and silicon dioxide and is a major part of artificial ground created by humans.
- Statement 2 is incorrect. Lithification is the process of turning loose sediment into solid rock. It involves compaction and cementation, where sediments are compacted under pressure and minerals precipitate to bind them together, forming sedimentary rocks.

Source: The Hindu

4. Correct Answer is (C)

• Nagarjuna Sagar Dam is one of the largest dams in the world, built on the Krishna River. It serves both irrigation and hydroelectric purposes, providing water to several districts in Andhra Pradesh and Telangana and generating electricity for the national grid.

Source: The Hindu

5. Correct Answer is (B)

- Statement 1 is incorrect. An atoll is a ring-shaped coral reef that encircles a lagoon, typically formed around a sinking volcanic island.
- Statement 2 is correct. The Chagos Archipelago includes the Great Chagos Bank, which is recognized as the world's largest coral atoll. The Chagos Islands, also known as the Chagos Archipelago, are a group of over 60 islands located in the Indian Ocean, about 500 kilometers south of the Maldives.

Source: The Hindu

6. Correct Answer is (D)

• The Northern Sea Route (NSR) is a maritime pathway that runs along the northern coast of Russia through the Arctic Ocean. It connects the Atlantic Ocean to the Pacific Ocean, providing a shorter and potentially faster route for shipping between Europe and Asia compared to traditional routes like the Suez Canal. The Northern Sea Route (NSR) is a shipping lane that runs along the Russian Arctic coast from the Kara Sea, along Siberia, to the Bering Strait. The NSR extends across four Arctic seas—the Barents, Kara, Laptev, and East Siberian seas—culminating at the Bering Strait.

Source: The Hindu

Polity

7. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The NCLT is a quasi-judicial body that deals with civil matters related to company law, such as insolvency, mergers, and disputes. It does not handle criminal cases. It is not a regulatory body like the Securities and Exchange Board of India (SEBI) or the Reserve Bank of India (RBI). Instead, it functions as a tribunal to resolve disputes and issues related to company law.
- Statement 3 is correct. The NCLT decisions can be appealed to the National Company Law Appellate Tribunal (NCLAT). The NCLAT serves as the appellate body for decisions made by the NCLT.

Source: The Hindu

8. Correct Answer is (B)

• While the judges of the High Courts are officially appointed by the President of India, the Governor of the concerned state is consulted in the process as part of the collegium system. This system involves the Chief Justice of India, senior judges of the Supreme Court, and the Governor, who all play roles in the selection and appointment of High Court judges.

Source: The Hindu



9. Correct Answer is (A)

• The term 'Black Coat Syndrome' is used to describe the anxiety and stress experienced by ordinary citizens when dealing with the court system, like "White Coat Hypertension,". The syndrome highlights issues such as case pendency, frequent adjournments, and the challenges faced by individuals, especially those from rural areas, when seeking justice.

Source: The Hindu

10. Correct Answer is (D)

Statements 1 and 2 are incorrect. The NCPCR does not regulate child labour laws directly. Instead, it
functions primarily as a recommendatory body that reviews and examines safeguards under existing
laws for the protection of child rights and recommends measures for their effective implementation.
The National Commission for Protection of Child Rights (NCPCR) derives its mandate from the
Commission for Protection of Child Rights (CPCR) Act, 2005, which is a statutory act rather than a
constitutional provision.

Source: The Hindu

11. Correct Answer is (C)

- Statements 1 and 3 are correct. Article 356 of the Indian Constitution provides for the imposition of President's Rule in a state when there is a failure of constitutional machinery, allowing the central government to take direct control of the state. When President's Rule is imposed, the executive authority of the state is assumed by the President, who acts through the centrally appointed Governor.
- Statement 2 is incorrect. During President's Rule, the state legislative assembly can either be dissolved or kept in suspended state. It is not automatically dissolved; this decision depends on the specific circumstances and actions taken by the central government.

Source: The Hindu

12. Correct Answer is (A)

- Statement 1 is correct. The Election Symbols (Reservation and Allotment) Order, 1968, ensures that recognized national and state political parties have exclusive rights to their reserved symbols. These symbols cannot be used by any other candidate in any constituency.
- Statement 2 is incorrect. The Election Commission of India (ECI), not the Supreme Court, is the authority responsible for deciding disputes involving splits within recognized political parties.

Source: The Hindu

13. Correct Answer is (B)

- Statement 1 is incorrect. The main product certification schemes offered by the Bureau of Indian Standards (BIS) are the ISI Mark Scheme (Scheme-I) and the Compulsory Registration Scheme (CRS) (Scheme-II).
- Statement 2 is correct. The Minister of Consumer Affairs, Food & Public Distribution is the ex-officio President of BIS.

Source: The Hindu

14. Correct Answer is (B)

• Statement 1 is incorrect. The right to strike is not considered a fundamental right under Article 21 or any other article of the Indian Constitution. Instead, it is recognized as a statutory right under the Industrial Disputes Act, 1947. The right to strike is subject to certain conditions and regulations, and it is not freely granted as a fundamental right.



• Statement 2 is correct. Collective bargaining in India is legally recognized and supported by various laws, including the Industrial Disputes Act, 1947, and the Trade Unions Act, 1926. These laws provide a framework for negotiation between employers and employees, typically through trade unions, to determine employment terms and conditions.

Source: The Hindu

15. Correct Answer is (A)

- Statement 1 is correct. The President of India appoints the Chief Election Commissioner (CEC) and other Election Commissioners. This appointment is made based on the recommendation of a selection committee. It has been outlined in Article 324 of the Indian Constitution and further detailed in the Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023.
- Statements 2 and 3 are incorrect. The Election Commission of India (ECI) is an independent constitutional body tasked with conducting free and fair elections in India. It operates independently of the government. The delimitation of constituencies is primarily handled by a Delimitation Commission, which is established by the Government of India under the Delimitation Commission Act.

Source: The Hindu

16. Correct Answer is (B)

- Statement 3 is correct. The Public Accounts Committee (PAC) is responsible for examining how funds are spent by the government to ensure they align with the appropriations approved by Parliament. It scrutinizes government expenditure to ensure transparency and accountability in financial matters.
- Statements 1 and 2 are incorrect. Disqualification of a member of Parliament due to defection is decided by the Speaker (for the Lok Sabha) or the Chairman (for the Rajya Sabha), without consulting the Election Commission. The Speaker of the Lok Sabha is not a member of the Cabinet and does not participate in cabinet meetings. The Speaker's role is to preside over meetings of the Lok Sabha and ensure the orderly conduct of business in the House.

Source: The Hindu

17. Correct Answer is (A)

- Statement 1 is correct. In India, which follows a parliamentary system, the executive (Council of Ministers headed by the Prime Minister) is part of the legislature and is accountable to it. The ministers are members of Parliament. In contrast, the United States operates under a presidential system where the executive branch, led by the President, is separate from the legislative branch (Congress), with distinct powers and responsibilities.
- Statement 2 is incorrect. The President of the United States is elected through an indirect electoral process involving the Electoral College. Citizens vote for electors in their respective states, and these electors then cast votes to elect the President and Vice President.

Source: DD News

Acts & Policies

18. Correct Answer is (A)

- Statements 1 and 2 are correct. The PM Gati Shakti National Master Plan utilizes a dynamic Geographic Information System (GIS) platform as a core component. The plan integrates data from various ministries and departments into a comprehensive database. This ensures planning, designing, and execution of infrastructure projects. According to the World Bank's Logistics Performance Index Report (2023), India's rank has improved by six places from 44 in 2018 to 38 in 2023.
- Statement 3 is incorrect. The PM Gati Shakti scheme does not replace the National Infrastructure Pipeline. Instead, it subsumes or incorporates the NIP.



Source: The Hindu

19. Correct Answer is (B)

- Statement 1 is incorrect. The primary objective of EMRS is to provide quality education to Scheduled Tribe (ST) students in remote and tribal areas. The focus is on bridging educational gaps and providing opportunities for ST students in rural and underserved regions.
- Statement 2 is correct. EMRS provide free education to ST children from Class VI to XII, covering middle school, secondary, and higher secondary education levels.

Source: DD News

Index & Reports

20. Correct Answer is (C)

• The annual report published by the United Nations Population Fund (UNFPA) to raise awareness of population issues is the State of World Population report.

Source: AIR

International Relations/Organizations

21. Correct Answer is (B)

- Statement 1 is correct. The Mindfulness India Summit aims to equip leaders and professionals with strategies to create healthier, more empathetic work environments by focusing on mindfulness, emotional intelligence, and neuroscience. The Mindfulness India Summit is organized by the Mindful Science Centre.
- Statements 2 and 3 are incorrect. The summit primarily focuses on mindfulness, emotional intelligence, and neuroscience, rather than artificial intelligence. The United Nations has recognized mindfulness as an important skill for achieving sustainable goals and success in leadership.

Source: The Hindu

22. Correct Answer is (B)

- Statement 1 is incorrect. WHO's primary objective, as stated in its Constitution, is "the attainment by all people of the highest possible level of health" rather than eradicating all diseases globally.
- Statements 2 and 3 are correct. The headquarters of the World Health Organization is in Geneva, Switzerland. India has committed the largest amount of funds so far in Southeast Asia for WHO's core program from 2025 to 2028.

Source: The Hindu

23. Correct Answer is (A)

- Statement 1 is correct. The WTSA is the primary governing conference for ITU-T, which is responsible for developing international telecommunications standards. It sets the strategic direction and work program for ITU-T every four years. WTSA is held every four years, bringing together delegates from ITU member states.
- Statement 2 is incorrect. The WTSA does not involve voting on telecom market prices. Instead, it focuses on setting standards, strategic directions, and priorities for telecommunications and information and communication technologies (ICT) standardization.

Source: AIR

24. Correct Answer is (A)

• Statements 1, 2 and 3 are correct. The GDC is designed to create a comprehensive framework for global governance of digital technologies and artificial intelligence. The GDC emphasizes that access to the internet should be considered a fundamental human right, advocating for affordable and inclusive connectivity. The GDC is an initiative proposed by the United Nations, specifically under the guidance of the UN Secretary-General as part of "Our Common Agenda".



• Statement 4 is incorrect. The GDC does not advocate replacing the SDGs with digital goals. Instead, it aims to leverage digital technologies to advance the SDGs. Thus, integrating digital innovation into sustainable development efforts.

Source: The Hindu

25. Correct Answer is (A)

- Statement 1 is correct. The ASEAN-India Summit is a platform for enhancing cooperation in political, economic, and security domains, aligning with India's Act East Policy. The policy aims to strengthen ties with Southeast Asian nations and is a central pillar of India's approach to the Indo-Pacific region.
- Statement 2 is incorrect. The East Asia Summit includes 18 countries: the 10 ASEAN member states (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam) plus Australia, China, India, Japan, New Zealand, South Korea, Russia, and the United States.

Source: The Hindu

26. Correct Answer is (C)

- Statements 1 and 3 are correct. The ASEAN Charter, signed in 2007, provides the legal and institutional framework for ASEAN. India has planned to share its expertise in Digital Public Infrastructure with ASEAN nations.
- Statement 2 is incorrect. Japan is not a member of ASEAN. The ASEAN member countries are Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar, and Cambodia. Among these countries, Indonesia has the largest population.

Source: The Hindu

27. Correct Answer is (B)

- India-Myanmar-Thailand Trilateral Highway: This project is associated with India's Act East Policy. It aims to enhance connectivity between India and Southeast Asia, promoting trade and cultural exchange as part of the broader diplomatic initiative.
- **Kaladan Multi-Modal Transit Transport Project:** This project is also part of the Act East Policy. It seeks to improve connectivity between India's northeastern states and Myanmar, facilitating trade and access to Southeast Asian markets.
- Bangladesh-China-India-Myanmar (BCIM) Economic Corridor: While this corridor involves India and aims to enhance regional connectivity, it is not specifically part of India's Act East Policy. The BCIM Economic Corridor is a separate initiative involving China and focuses on broader regional integration.
- Trans-Siberian Railway: This railway is not associated with India's Act East Policy. It primarily connects Russia's European part with the Russian Far East and does not involve India or its strategic initiatives in Southeast Asia.

Source: The Hindu

28. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The "Shanghai Spirit" refers to the guiding principles of the SCO, which include mutual trust, mutual benefit, equality, consultation, respect for cultural diversity, and pursuit of common development. The supreme decision-making body of the SCO is the Council of Heads of State (CHS). The CHS meets annually to make important decisions regarding the organization.
- Statement 3 is correct. The SCO is the world's largest regional organization in terms of geographic scope and population, covering approximately 60% of Eurasia and 40% of the global population.

Source: The Hindu

29. Correct Answer is (A)



- Statements 1 and 2 are correct. The IPU is the global organization of national Parliaments. It brings together parliaments from around the world to promote democratic governance and cooperation. The headquarters of the IPU are located in Geneva, Switzerland.
- Statement 3 is incorrect. While the IPU collaborates closely with the United Nations and participates in joint events, it is not a subsidiary organ of the UN General Assembly. However, it has permanent observer status at the UN.

Source: The Hindu

Economy

30. Correct Answer is (A)

 Floriculture involves the cultivation of flowering and ornamental plants for gardens and floristry, often in controlled environments like greenhouses, to optimize production and meet market demands.

Source: The Hindu

31. Correct Answer is (D)

 A lower policy repo rate generally reduces the cost of borrowing for businesses and individuals, leading to increased investment and consumer spending, which in turn stimulates economic growth.

Source: The Hindu

32. Correct Answer is (B)

- UPI123 is designed specifically for feature phone users. It allows them to access UPI services without needing a smartphone or internet connection. Transactions can be performed using methods such as phone calls, interactive voice response (IVR), missed calls, and sound-based technology. This system was created to broaden digital payment accessibility for users who do not have smartphones. The transaction limit for UPI123 was initially set at ₹5,000 per transaction and has been increased to ₹10,000.
- **UPI Lite** targets smartphone users and functions as an on-device wallet for making small-value transactions. While it does not require internet connectivity for transactions themselves, users need internet access to load money into the wallet from their bank accounts. Initially, UPI Lite allowed transactions up to ₹500, which has been increased to ₹1,000 per transaction. The overall wallet limit has also been raised from ₹2,000 to ₹5,000. This service is aimed at simplifying and speeding up minor transactions without using the core banking system in real-time.

Source: The Hindu

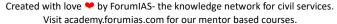
33. Correct Answer is (B)

- Statement 1 is incorrect. The NMHC is primarily focused on showcasing India's maritime heritage and history through museums, galleries, and educational facilities. It will be developed at Lothal in Gujarat. It is being developed as part of the Sagarmala initiative by the Ministry of Ports, Shipping, and Waterways.
- Statement 2 is correct. The NMHC will feature Asia's biggest underwater marine museum as part of its attractions.

Source: The Hindu

34. Correct Answer is (B)

• Statement 1 is incorrect. The Wholesale Price Index (WPI) measures inflation at the wholesale level, tracking changes in the prices of goods sold in bulk before they reach the retail market. Retail inflation, on the other hand, is measured by the Consumer Price Index (CPI), which reflects price changes from the consumer's perspective.





• Statement 2 is correct. A neutral monetary policy stance implies that the central bank's policy is balanced and does not aim to either stimulate or restrain economic growth. It is intended to maintain current economic conditions without exerting additional pressure in either direction.

Source: The Hindu

35. Correct Answer is (A)

- Statement 1 is correct. CBDCs can be implemented without relying on blockchain technology. While blockchain offers benefits such as improved security and functionality, it is not a mandatory requirement for CBDC implementation. Central banks can choose alternative technological solutions that do not involve blockchain.
- Statement 2 is incorrect. CBDCs are centralized digital currencies issued and regulated by central banks, meaning they operate under government control and within the existing financial system. In contrast, cryptocurrencies like Bitcoin and Ethereum are decentralized, operating on networks that are not controlled by any central authority.

Source: AIR

36. Correct Answer is (B)

- **Statement I** is correct: The gig economy has made a significant contribution to India's gross domestic product (GDP). According to estimates, it could contribute around 1.25% of India's GDP in the coming years, playing a key role in the country's economic structure by creating millions of jobs and allowing businesses to cut costs through flexible labour arrangements.
- **Statement II** is also correct: Gig workers in India operate in various sectors, including transportation (e.g., cab drivers), delivery services (e.g., food delivery workers), and freelancing (e.g., content creation and data entry).
- However, Statement II does not fully explain Statement I because the gig economy's contribution to
 GDP is primarily due to its cost-effectiveness for businesses and its ability to address the demand for
 flexible work in various industries. The contribution to GDP is a result of economic activities across
 these sectors but is not solely explained by the diversity of sectors. While StatementII supports Statement-I by showing the involvement of gig workers in various sectors, it doesn't
 fully explain how or why this leads to a significant GDP contribution.

Source: The Hindu

37. Correct Answer is (B)

• The key technological advancement introduced during the Green Revolution in India was the introduction of high-yielding varieties (HYVs) of seeds. These HYVs were developed to significantly increase crop yields, particularly for staple crops like wheat and rice, and were a central component of the Green Revolution efforts in India.

Source: The Hindu

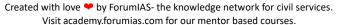
Environment

38. Correct Answer is (B)

- Statements 1 and 2 are correct. Red pandas inhabit the temperate forests of the Himalayas, including regions in India such as Sikkim, Darjeeling Hills, and Arunachal Pradesh. Red pandas are primarily nocturnal and crepuscular, meaning they are most active during the night and twilight hours.
- Statements 3 and 4 are incorrect. Red pandas are classified as Endangered on the IUCN Red List. While Padmaja Naidu Himalayan Zoological Park (Darjeeling Zoo) is a key site for red panda conservation and breeding, they are also found in other zoos.

Source: AIR

39. Correct Answer is (C)





Birds contribute to nutrient recycling in ecosystems. However, they don't directly decompose dead
material. Some bird species, like vultures, help recycle nutrients by consuming dead animals
(carrion). By doing so, they help break down and redistribute nutrients back into the ecosystem.
Decomposition in ecosystems is mainly carried out by decomposers like bacteria, fungi, and certain
invertebrates.

Source: DD News

40. Correct Answer is (A)

- Statements 1 and 3 are incorrect. GRAP consists of four stages based on different AQI levels: Stage I: "Poor" (AQI 201-300), Stage II: "Very Poor" (AQI 301-400), Stage III: "Severe" (AQI 401-450), Stage IV: "Severe Plus" (AQI > 450). The implementation of GRAP is overseen by the Commission for Air Quality Management (CAQM) in NCR and adjoining areas.
- Statement 2 is correct. GRAP is a set of emergency measures that are activated based on AQI levels to prevent further deterioration of air quality in the Delhi-NCR region.

Source: The Hindu

41. Correct Answer is (B)

• Nitrifying bacteria are responsible for the process of nitrification, which involves two main steps. First, ammonia (NH_3) is oxidized to nitrite (NO_2^-) by bacteria such as Nitrosomonas. Then, other bacteria like Nitrobacter convert nitrite into nitrate (NO_3^-). This conversion is crucial because it transforms ammonia, which can be toxic to plants, into nitrates that plants can readily absorb and use for growth.

Source: The Hindu

42. Correct Answer is (B)

- Statement 1 is incorrect. Carbon Dioxide Removal (CDR) refers to techniques that remove CO2 already present in the atmosphere and store it durably, whereas Carbon Capture and Storage (CCS) involves capturing CO2 emissions at the source (like power plants) before they enter the atmosphere. CCS from industrial sources does not remove CO2 from the air but prevents new emissions from being released.
- Statement 2 is correct. While removing CO2 can help reduce warming, it does not address other impacts of climate change, such as sea level rise or changes in weather patterns, which may persist even after CO2 levels are reduced.

Source: DD News

43. Correct Answer is (A)

- Statement 1 is correct. Sugarcane is a major feedstock for ethanol production in India. It is widely cultivated and provides a good alternative for bioethanol production.
- Statements 2 and 3 are incorrect. The Montreal Protocol primarily focuses on phasing out substances that deplete the ozone layer, such as chlorofluorocarbons (CFCs). It does not specifically address or support the use of biofuels like ethanol for combating climate change. India has achieved a 10% ethanol blending target and is working towards reaching a 20% blending target by 2025-26.

Source: DD News

44. Correct Answer is (B)

- Statement 1 is correct. Tree rings, also known as growth rings, are used to determine the age of a tree. Each ring typically represents one year of growth, allowing scientists to estimate the tree's age by counting these rings.
- Statement 2 and 3 are incorrect. Tree rings are less visible in tropical climates because trees in these regions can grow year-round without distinct seasonal changes that cause ring formation. Tree rings



are more visible in temperate and boreal regions where there are clear seasonal variations. Tree rings consist of various cell types, including vessel elements (in hardwoods) that help conduct water, but they also include other structures like fibers and tracheids (in softwoods) that provide strength and support.

Source: The Hindu

Science & Technology

45. Correct Answer is (B)

- Statement 1 is incorrect. The primary purpose of the Space Debris Mitigation Guidelines is to minimize the generation of space debris and ensure the safe and sustainable use of outer space.
- Statement 2 is correct. The IADC is an international forum that coordinates efforts to manage space debris. It focuses on exchanging information, facilitating joint research, and developing guidelines to mitigate space debris for Earth-orbiting vehicles.

Source: The Hindu

46. Correct Answer is (D)

Artificial Neural Networks (ANNs) are computational models inspired by the human brain's structure
and function. They are designed to recognize patterns and solve complex problems in fields like
artificial intelligence (AI), machine learning, and deep learning. ANNs are widely used across various
domains such as Image and Speech Recognition, Natural Language Processing (NLP), Financial
Forecasting, Healthcare, and Social Media.

Source: The Hindu

47. Correct Answer is (B)

- Statement 1 is incorrect. Trachoma is a bacterial infection caused by Chlamydia trachomatis that primarily affects the eyes and can lead to blindness if untreated.
- Statement 2 is correct. The World Health Organization (WHO) has recognized that India has successfully eliminated trachoma as a public health problem. India is now the third country in the WHO Southeast Asia Region to reach this milestone.

Source: The Hindu

48. Correct Answer is (C)

- Statements 1 and 3 are correct. There are six categories in which Nobel Prizes are awarded each year:
 Physics, Chemistry, Physiology or Medicine, Literature, Peace, and Economic Sciences. The Nobel
 Prizes are awarded by specific institutions designated by Alfred Nobel's will and do not involve the United Nations General Assembly.
- Statement 2 is incorrect. The 2024 Nobel Prize in Chemistry was awarded for advancements in computational protein design and protein structure prediction.

Source: The Hindu

49. Correct Answer is (B)

• India, Japan, Australia, and the United States are the permanent participants in the Malabar exercise. The exercise originally started as a bilateral event between India and the United States in 1992, with Japan becoming a permanent member in 2015. Australia rejoined the exercise in 2020, making these four nations the current permanent participants.

Source: The Hindu

50. Correct Answer is (C)

• Statements 1 and 2 are correct. India has developed nuclear-powered ballistic missile submarines, known as SSBNs, under the Arihant-class program. The INS Arihant and INS Arighat are examples of such submarines that have been indigenously manufactured and commissioned into service. Nuclear-



powered attack submarines (SSNs) are valued for their ability to remain submerged for extended periods, providing them with unlimited endurance. They can perform various tasks, including antisubmarine warfare, anti-surface warfare, and intelligence gathering.

Source: The Hindu

51. Correct Answer is (C)

 Rice fortification aims to combat micronutrient deficiencies by adding essential vitamins and minerals, such as iron, folic acid, and vitamin B12, to improve public health outcomes, particularly in populations that rely heavily on rice as a staple food.

Source: AIR

52. Correct Answer is (A)

- Statement 1 is correct. Tele-MANAS aims to provide free, round-the-clock tele-mental health services throughout India, particularly focusing on remote or underserved areas.
- Statement 2 is incorrect. The National Institute of Mental Health and Neurosciences (NIMHANS) in Bengaluru serves as the nodal center for the Tele-MANAS programme.

Source: The Hindu

53. Correct Answer is (C)

 Auroras at lower latitudes are often due to increased solar activity, such as coronal mass ejections (CMEs), which can expand the auroral oval and make auroras visible further from the poles. Such solar activity can affect satellite operations and other technologies on Earth, making accurate predictions crucial for mitigating potential disruptions to satellite-based services.

Source: The Hindu

54. Correct Answer is (A)

- Statement 1 is correct. Biobanks are repositories that store biological samples such as blood, DNA, cells, tissues, and organs, along with their associated genetic data for research purposes.
- Statement 2 is incorrect. While India does not have specific laws dedicated solely to biobanks, there are guidelines in place that provide some level of regulation. The Indian Council for Medical Research (ICMR) has issued the 'National Ethical Guidelines for Biomedical and Health Research Involving Human Participants,' which include provisions related to biobanking.

Source: The Hindu

55. Correct Answer is (C)

- **Gene Editing**: Gene editing, particularly through CRISPR-Cas9 technology, plays a significant role in precision medicine. It allows for precise modifications at the genetic level, enabling targeted therapies for genetically defined diseases.
- **mRNA Therapeutics**: mRNA therapeutics are important in precision medicine due to their ability to produce specific proteins or peptides needed for treatment.
- **Organ-on-Chips**: Organ-on-chips technology is also vital for precision medicine as it allows for the replication of human organ environments in vitro. This enables personalized drug testing and disease modelling, which are essential for developing individualized treatment plans.

Source: The Hindu

56. Correct Answer is (B)

- Statement 1 is incorrect. X-band radars operate at a wavelength of 2.5-4 cm, which is shorter than the wavelengths used by other Doppler radars like S-band (8-15 cm) or C-band (4-8 cm) radars.
- Statement 2 is correct. Both X-band and Doppler radars are used for weather monitoring. X-band radars are particularly useful for detecting smaller particles such as rain droplets and are often used



for short-range weather observations. Doppler radars, in general, are used to measure precipitation, wind speed, and storm movement across various bands, including S-band and C-band, in addition to X-band.

Source: The Hindu

57. Correct Answer is (B)

• THAAD is specifically designed to intercept and destroy short, medium, and intermediate-range ballistic missiles during their terminal phase, which is the final stage of their flight path, either inside or outside the Earth's atmosphere.

Source: The Hindu

58. Correct Answer is (C)

• The eMigrate portal is designed to protect the rights and welfare of Indian workers seeking employment overseas. It aims to ensure safe and legal migration by providing a transparent platform for registration, recruitment tracking, and access to authorized employers. The portal also includes features such as a grievance redressal mechanism and a multilingual helpline to assist workers facing issues abroad.

Source: AIR

59. Correct Answer is (A)

- **Statement-I is correct**: India is currently facing a severe shortage of organs for transplants. India has a significant gap between the demand for organ transplants and the available supply, leading to long waiting lists and many patients dying while waiting for transplants.
- **Statement-II** is also correct: India has one of the lowest rates of deceased organ donation in the world. India's deceased organ donation rate is below one donor per million population, which is much lower than in many other countries like Spain and the United States.
- Hence, Statement-II provides a direct explanation for Statement-I because the low rate of deceased organ donation contributes significantly to the shortage of organs available for transplant in India.

Source: The Hindu

60. Correct Answer is (B)

• The MQ-9B drone is best described as a high-altitude, long-endurance armed unmanned aerial vehicle because it is specifically designed to operate at high altitudes for extended periods. It is equipped with advanced surveillance and reconnaissance systems, making it highly effective for intelligence-gathering missions.

Source: The Hindu

