

# **10 PM Current Affairs Quiz Weekly Compilation**

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*For UPSC CSE Prelims*

**[3<sup>rd</sup> Week] March, 2024**

## 10 PM Compilation March [Third Week] 2024

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## Art & Culture

**Q.1) The 'Lisu tribe' resides in:**

- a) Arunachal Pradesh
- b) Andaman & Nicobar Islands
- c) Jharkhand
- d) Kerala

**Q.2) Consider the following statements with respect to the "Manjusha Art":**

- 1. The art form is made up of bamboo, jute, and paper.
- 2. Abstract geometric patterns are often depicted in Manjusha art.
- 3. The art form is completely based on the folklore of Bihula-Bishari.

**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.3) Consider the following pairs:**

**Awards-----Specifications**

- 1. Sangita Kalanidhi award-----Given for bringing several disciples to the concert platform
- 2. Sangita Kala Acharya awards-----The highest honour in Carnatic music.
- 3. Nritya Kalanidhi award-----Presented for one of the classical dances.

**How many of the above pairs are correctly matched?**

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

**Q.4) Which of the following countries traditionally celebrate 'Nowruz'?**

- a) Iran, Afghanistan, and Tajikistan
- b) India, Pakistan, and Bangladesh
- c) China, Japan, and Korea
- d) Egypt, Saudi Arabia, and Jordan

## Geography

**Q.5) With reference to the country Haiti, consider the following statements:**

- 1. It is the poorest country in the Western Hemisphere.
- 2. Havana is its capital city.
- 3. The Dominican Republic borders Haiti on the eastern side of the island.

**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. The Holocene epoch is characterized by a relatively stable climate that supported the development of human civilization.
2. The Anthropocene epoch is distinct from the Holocene epoch because it emphasizes the absence of significant human impact on the environment.

**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) The 'Gulf of Tonkin' is a body of water located in:**

- a) The Indian Ocean
- b) The South China Sea
- c) The Pacific Ocean
- d) The Caspian Sea

**Q.8) Which one of the following is the largest lake in Nigeria?**

- a) Lake Volta
- b) Lake Agulu
- c) Lake Oguta
- d) Lake Bosumtwi

**Q.9) Consider the following statements:**

**Statement-I:** India is among the water stressed countries in the world.

**Statement-II:** India has only 11% of the total available freshwater resources 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.10) With reference to Critical Minerals, consider the following statements:**

1. These are essential for manufacturing high-tech products like smartphones and electric vehicles.
2. Iron ore is considered as one of the critical minerals.
3. United Nations Educational, Scientific and Cultural Organization (UNESCO) focuses on identifying and addressing issues related to critical minerals.

**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:**

1. It is a kharif crop.
2. It requires temperature between 21 degrees Celsius and 30 degrees Celsius.
3. At least 200 frost free days is also necessary for the plant to mature.
4. Rainfall should range between 50-75 cm.

**Which one of the following crops requires the above climatic condition?**

- a) Sesame
- b) Sugarcane
- c) Cotton
- d) Maize

**Q.12) Which one of the following countries does NOT border the South China Sea?**

- a) China
- b) Vietnam
- c) Indonesia
- d) Japan

## Polity

**Q.13) Consider the following statements:**

1. The Constitution envisages the Election Commission (ECI) as an independent body that is responsible for conducting free and fair elections.
2. Under the Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023, a four-member Selection Committee is responsible for selecting ECs for the appointment.

**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.14) Consider the following statements:**

1. Non-Personal Data (NPD) constitutes the primary kind of citizen data obtained by the government, which possesses the potential of serving as a 'public good'.
2. Non-Personal Data Protection and Utilization Act (NPDPUA) 2023, regulates the use of NPD 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

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**Q.15) Consider the following statements:**

1. The Election Commission of India (ECI) is responsible for the allotment of symbols to the political parties.
2. In any electoral constituency across India, a candidate representing a National Party may be assigned an alternative symbol instead of the party 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.16) Consider the following statements:**

1. Under the Constitution, the terms of both state Assemblies and Lok Sabha is for five years from the first sitting of the House.
2. The term of the state assembly may be extended by Parliament when there is a proclamation of Emergency.

**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.17) Consider the following statements:**

1. A judge retires from the High Court at the age of 62 years.
2. According to the Constitution of India, a judge must observe a cooling-off period of up to two years after the retirement, before joining any political party.

**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.18) With reference to the Model Code of Conduct (MCC), consider the following statements:**

1. It is like a rulebook for political parties and leaders during elections in India.
2. During the period of 'election silence' under the Model Code of Conduct (MCC), campaigning is prohibited.

**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.19) The primary responsibility of the Directorate General of Civil Aviation (DGCA) in India is to:**

- a) Manage airport operations and air traffic control.
- b) Oversee the safety and security of civil aviation.
- c) Promote competition among airlines within the domestic market.
- d) Handle customer complaints regarding airline services.

## Acts & Policies

**Q.20) With reference to the Government e-Marketplace (GeM), consider the following statements:**

1. It eliminates human interface in vendor registration, order placement and payment processing, to a great extent.
2. The government has made it mandatory for sellers to display the 'country of origin' on products to be sold on GeM portal.
3. It limits the entry of foreign bidders into the Indian market.

**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 pairs:**

**Operations-----Objectives**

1. Operation Dost----- Evacuating Indians and other foreign nationals from drought hit Nigeria.
2. Operation Ganga-----Airlifting Indian citizens, mainly students, from Ukraine during the Russian invasion.
3. Operation Indravati-----Evacuating Indian nationals from Haiti.

**How many of the above pairs are correctly matched?**

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

## Index & Reports

**Q.22) With reference to the World Happiness Report 2024, consider the following statements:**

1. As per the report, none of the world's largest countries were among the happiest countries.
2. The report found that younger generations were happier than their older peers in most of the world's regions.
3. The ranking of India has improved from the last year in the index.

**How many of the statements given above are correct?**

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

## International Relations/Organizations

**Q.23) Consider the following statements:**

1. One of the objectives of the Indian Ocean Rim Association (IORA) is to resolve territorial disputes arising in the Indian Ocean.
2. IORA's apex body is the Council of Foreign Ministers (COM) which meets annually.
3. The Colombo Security Conclave (CSC) is a regional security grouping focused on the Indian Ocean Region (IOR).

**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.24) With reference to the Trade and Economic Partnership Agreement (TEPA) signed between India and the European Free Trade Association (EFTA) countries, which of the following statement(s) is/are correct?**

1. As per the agreement, India can withdraw tariff concessions if investment targets aren't met by the EFTA countries.
2. The tariff concession, as per the agreement, applies to the gold imported from European Free Trade Association (EFTA) countries to India.
3. India's exports to EFTA countries are expected to see a significant impact due to the agreement.

**Select the correct answer using the codes given below:**

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

**Q.25) With reference to the Indo Pacific Economic Framework (IPEF), how many of the following statements are correct?**

1. It aims to establish a free trade agreement with strict tariff reductions among member countries.
2. 'Fair and Resilient Trade' is one of the pillars of the IPEF.
3. All countries participating in the IPEF have signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

**Select the correct answer using the codes given below:**

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

**Q.26) The World Meteorological Organisation (WMO) is a specialized agency of:**

- a) The World Bank
- b) The European Union
- c) The United Nations
- d) North Atlantic Treaty Organization (NATO)



**Q.27) In the context of international law, which one of the following correctly distinguishes a UN resolution from a treaty?**

- a) A UN resolution requires unanimous approval by all member states unlike a treaty.
- b) A treaty is legally binding, whereas a UN resolution is not binding.
- c) A treaty can only be initiated by the UN Security Council while a resolution can only be initiated in UN Secretariat.
- d) A UN resolution is ratified by the International Court of Justice, whereas a treaty requires approval from member parties to it.

**Q.28) With reference to the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE), consider the following statements:**

- 1. Its mission is to manage the global supply chain for hydrogen fuel.
- 2. India is one of the member countries of IPHE.
- 3. It also facilitates sharing information on policies, technology status, initiatives, and standards to promote the cost-effective transition to using fuel cells and hydrogen in the economy.

**How many of the statements given above are correct?**

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

**Q.29) Consider the following statements with respect to the 'UN Security Council':**

- 1. It consists of 5 permanent member states and 10 non-permanent member states elected for 2-year terms.
- 2. The concept of "veto power" in the UN Security Council gives power only to the Secretary-General to veto resolutions.
- 3. Approving the admission of new member states to the United Nations is not a power of the United Nations Security Council (UNSC).

**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.30) Which one of the following is the primary objective of the Shanghai Cooperation Organisation (SCO) Startup Forum?**

- a) Promote cultural exchange programs between member states.
- b) Foster collaboration and innovation amongst SCO member states' startups.
- c) Provide financial aid to struggling startups within the SCO.
- d) Establish trade agreements for specific industries within the SCO.

**Q.31) With reference to the International Telecommunication Union (ITU), which of the following statement(s) is/are correct?**

- 1. It is a non-governmental organization (NGO) that coordinates global telecommunications efforts.
- 2. It manages and allocates radio spectrum frequencies.

**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.32) Consider the following statements:**

1. Bhutan has joined China's Belt and Road Initiative (BRI).
2. India is Bhutan's top trading partner and also the main source of investment.
3. The cooperation between India and Bhutan extends to digital projects like RuPay and BHIM, facilitating financial linkages between the two countries.

**How many of the statements given above are correct?**

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

## Economy

**Q.33) The term "blue chip" refers to stocks of companies that are:**

- a) Newly launched and have high growth potential.
- b) Small and have volatile stock prices.
- c) Well-established and financially stable with a long history of success.
- d) Prone to high dividends but with slow growth.

**Q.34) Which one of the following statements about 'core inflation' is correct?**

- a) It includes the price changes of all goods and services.
- b) It excludes the price changes of food and energy due to their volatility.
- c) It measures inflation experienced by low-income households.
- d) It is always lower than headline inflation.

**Q.35) When the central bank of a country decides to lower its benchmark interest rate. Which one of the following will likely be the impact on borrowing rates and bond yields?**

- a) Borrowing rates will decrease, while bond yields will decrease.
- b) Borrowing rates will increase, while bond yields will increase.
- c) Borrowing rates will decrease, while bond yields will increase.
- d) Borrowing rates will increase, while bond yields will decrease.

**Q.36) Consider the following statements with respect to the Infrastructure Investment Trust (InvIT):**

1. It is the only debt financing mechanism for large-scale government infrastructure projects.
2. InvIT are regulated by the National Investment and Infrastructure Fund (NIIF).
3. Investors receive a guaranteed fixed returns when investing through InvITs.

**How many of the statements given above are correct?**

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

**Q.37) Consider the following statements:**

1. Minimum Support Price (MSP) is the minimum price at which farmers are legally allowed to sell their crops.
2. The MSP is announced annually for 23 crops covering both the kharif and rabi seasons.
3. MSP system has played a crucial role in safeguarding food security in India.
4. Only 6% of farmers, primarily those cultivating paddy and wheat in States such as Punjab, benefit from MSP.

**Which of the statements given above are correct?**

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

**Q.38) If the US Federal Reserve decides to raise interest rates, which one of the following would be the most likely consequence for India?**

- a) Increased borrowing costs for Indian businesses and consumers
- b) A stronger Indian Rupee compared to the US Dollar
- c) A surge in foreign direct investment in Indian companies
- d) A decrease in inflation rates in India

**Q.39) In which one of the following ways, does a weaker U.S. dollar usually affect global gold prices?**

- a) It decreases gold prices
- b) It increases gold prices
- c) It has no effect on gold prices
- d) It leads to fluctuations in gold prices

**Q.40) Which one of the following regulatory bodies oversees Exchange-traded funds (ETFs) in India?**

- a) Securities and Exchange Board of India (SEBI)
- b) Reserve Bank of India (RBI)
- c) Ministry of Finance
- d) National Stock Exchange (NSE)

**Q.41) Which one of the following statements correctly describes 'Real GDP'?**

- a) The total market value of all final goods and services produced within a country in a given year, adjusted for inflation.
- b) The total market value of all goods and services produced within a country in a given year, regardless of inflation.
- c) The total income earned by residents of a country in a given year.
- d) A measure of the total wealth of a country.

## Environment

**Q.42) With reference to the Namdapha Tiger Reserve, consider the following statements:**

1. The reserve is located in Rajasthan.
2. It is the westernmost reserve of India.
3. It is crossed from east to west by the Noa Dihing River.

**How many of the statements given above are correct?**

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

**Q.43) Consider the following statements:**

1. The principles of equity and common but differentiated responsibilities are enshrined in the UN Framework Convention on Climate Change (UNFCCC).
2. United Nations Development Programme (UNDP) uses Integrated Assessment Models (IAMs) to examine possible futures of the energy and climate system and economies.

**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.44) Consider the following statements:**

1. Minerals like lithium, cobalt, and copper, are essential for clean energy technologies like electric vehicles (EVs) and energy storage systems.
2. Despite significant investments in renewables, India still continues to receive support from the World Bank to accelerate transition towards renewables.

**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.45) Consider the following statements:**

1. Shipping accounts for nearly 13% of the world's carbon dioxide emissions.
2. The International Maritime Organization (IMO) emission reduction target from international shipping includes at least a 20% reduction in absolute GHG emissions compared to 2008 levels, and striving for a 30% reduction by 2030.

**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.46) With reference to Vechur cow, consider the following statements:**

1. It is a rare breed of cattle indigenous to Kerala.
2. It is one of the largest indigenous breeds of cattle found in India.
3. The White Revolution led to a decline in the Vechur population.

**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.47) With reference to Great Indian Bustard, consider the following statements:**

1. It is one of the heaviest flying birds, endemic to the Indian subcontinent.
2. It lives in arid and semi-arid grasslands.
3. It is categorized as Critically Endangered in the IUCN Red List of Threatened Species.

**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.48) With reference to the North Atlantic Right Whale, consider the following statements:**

1. They primarily occur in Atlantic coastal waters on the continental shelf.
2. They are categorized 'Endangered' in the IUCN Red List of Threatened Species.
3. They have stocky black bodies with no dorsal fins.

**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) In the context of the Ranthambore National Park, which of the following statements are correct?**

1. It is located at the junction of the Aravali and Vindhya hill ranges.
2. It is bounded to the north by the Bhavani River and to the south by the Barak River.
3. Kailadevi Wildlife Sanctuary and Sawai Mansingh Wildlife Sanctuary are connected to the core of Ranthambore National Park.

**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.50) Which one of the following statements best describes the term 'Biomining of Legacy Waste', seen in the news recently?**

- a) It involves using advanced chemical processes to extract valuable metals from electronic waste.
- b) It refers to the utilization of organic materials to accelerate the decomposition of waste in landfills.
- c) It is a process where microorganisms are used to break down and extract valuable resources from old landfill sites in an environmentally sustainable manner.
- d) It involves the use of traditional mining techniques to extract minerals and resources from abandoned mines.

**Q.51) Consider the following statements:**

- 1. Microplastics are defined as any solid plastic particle insoluble in water, with dimensions between 1  $\mu\text{m}$  and 1,000  $\mu\text{m}$ .
- 2. Biodegradable plastics are plastics that can be recycled multiple times without degradation.

**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

## Science & Technology

**Q.52) Consider the following statements:**

**Statement-I:** Neutrinos are often referred to as "ghost particles".

**Statement-II:** Neutrinos have almost no mass, no electric charge, and interact very weakly with other matter.

**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.53) 'Hemoglobin A1C test (HbA1C) test', seen in the news recently, measures:**

- a) Diabetes
- b) Cervical Cancer
- c) Heart Conditions
- d) Levels of Cholesterol in the Blood

**Q.54) Which one of the following is the primary purpose of the Space-borne Assistant and Knowledge Hub for Crew Interaction (SAKHI) app onboard the spacecraft?**

- a) Providing television facilities for the crew during long journeys.
- b) Providing real-time information and assistance to astronauts.
- c) Monitoring and controlling spacecraft systems.
- d) Facilitating communication between the crew and mission control.

**Q.55) Which of the following best describes the primary focus of the 'Tiger Triumph exercise'?**

- a) Countering maritime piracy
- b) Conducting close-quarter combat drills
- c) Humanitarian Assistance and Disaster Relief (HADR) operations
- d) Anti-submarine warfare

**Q.56) Consider the following statements:**

- 1. Ballistic Missiles fly at low altitudes and follow a relatively flat and level trajectory.
- 2. Multiple Independently Targetable Re-entry Vehicles (MIRVs) technology help evade ballistic missiles defences.
- 3. The Agni-5 is the longest-range missile India has tested so far.

**How many of the statements given above are correct?**

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

**Q.57) Consider the following statements:**

- 1. AI models undergo training on extensive datasets and have limitations in independent operation whereas an AI Agent has the ability to process data and take actions autonomously.
- 2. Alexa, developed by Amazon, is an example of AI model.

**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.58) With reference to the Double Asteroid Redirection Test (DART) Mission, consider the following statements:**

- 1. It was a NASA space mission aimed at testing a method of planetary defense against near-Earth objects (NEOs).
- 2. The mission was the first to demonstrate a technique of asteroid deflection using a kinetic impactor spacecraft.
- 3. The mission's success criteria involved completely altering the orbit of Dimorphos, a moonlet of the asteroid Didymos.

**How many of the statements given above are correct?**

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

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### Q.59) Consider the following statements:

1. Elimination of a disease refers to the permanent elimination of a disease with no risk of reintroduction.
2. Guinea worm disease (GWD) is a parasitic disease caused by drinking contaminated water.
3. Disease elimination should be planned only after careful analysis of the costs and benefits associated with it.

### 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.60) Consider the following statements:

1. Nuclear power emits four times less carbon than solar farms or other renewable sources such as wind, hydropower, and geothermal.
2. Nuclear power has the capacity to supply uninterrupted energy irrespective of geographical constraints.
3. Nuclear power plants (NPP) have high operating costs, larger land imprint and a shorter life cycle compared to all the other renewable energy sources.
4. Nuclear power contributes only 1.6% of the total renewable energy mix in India.

### Which of the statements given above are correct?

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

## Answer Key

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



## Answers & Explanations

### Art & Culture

**1. Correct Answer is (A)**

- The Lisu tribes are inhabitants of Arunachal Pradesh. They are one of the minor tribal communities in the state and are known for their unique cultural practices and traditional knowledge systems. They primarily live in the districts of Longding, Tirap, Changlang, and Lohit in the eastern part of the state, close to the border with Myanmar. The Lisu (or Yobin) people of Arunachal Pradesh, India, have a unique tradition of naming their children based on birth order. They inhabit the Namdapha Tiger Reserve.

Source: [The Hindu](#)

**2. Correct Answer is (C)**

- Statements 1 and 3 are correct. Manjusha art is an ancient and historically significant art form of Bhagalpur, Bihar. Manjusha art or Manjusha Kala is often referred to as Snake paintings by foreigners as swirling snakes in the art depict the central character in Bihula's tale of love and sacrifice. This art reflects the history of ancient Anga Mahajanapada. They are temple-shaped boxes comprising eight pillars. They are made of bamboo, jute, and paper. They also contain paintings of Hindu gods and goddesses and other characters. These boxes are used in Bishahari puja. In Manjusha Art Borders are very Important. It is a Line drawing Art and a Folk Art. It is a Scroll Painting and is completely based on the folklore of Bihula-Bishari. In Manjusha Art Characters are displayed as X letter of English Alphabets. Major Motifs of Manjusha Art – Snake, Champa Flower, Sun, Moon, Elephant, Turtle, Fish, Maina Bird, Kamal Flower, Kalash Pot, Arrow Bow, ShivLing, Tree etc. Major Characters of Manjusha Art – Lord Shiva, Mansa DeVi (Bishari), Bihula, Bala, Hanuman, Chandu Saudagar.
- Statement 2 is incorrect. Manjusha Art is primarily known for its figurative style. The art form focuses on depicting characters and stories from mythology and folklore, not abstract geometric patterns.

Source: [The Hindu](#)

**3. Correct Answer is (A)**

- Only 3 is correctly matched.
- Sangita Kalanidhi award – It is the highest or one of the highest honours in the Carnatic music given by the Madars Music Academy.
- Sangita Kala Acharya awards – It is given for bringing several disciples to the concert platform. Two senior musicians/preceptors are given this award each year.

Source: [The Hindu](#)

**4. Correct Answer is (A)**

- Iran, Afghanistan, and Tajikistan are among the countries that traditionally celebrate Nowruz. Nowruz, which means "new day" in Persian, is the Iranian New Year or Persian New Year, celebrated by various ethnic groups across the Middle East, Central Asia, and parts of South Asia. Other countries and regions where Nowruz is observed include Azerbaijan, Kyrgyzstan, Uzbekistan, Kazakhstan, Turkmenistan, Iraq, Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Georgia, and parts of Turkey, Syria, Pakistan, India, and China. The celebration often begins on the spring equinox, usually falling on March 20 or 21, and marks the beginning of the new year in the Persian calendar.

Source: [The Hindu](#)

**Geography**

**5. Correct Answer is (C)**

- Statements 1 and 3 are correct. Haiti is the poorest country in the Western Hemisphere, with more than half of its population living below the poverty line and facing significant challenges related to access to basic services, natural disasters, and political instability. Its poverty rate is among the highest in the region, and the country often ranks low on various human development indices. The Dominican Republic borders Haiti on the eastern side of the island of Hispaniola. Haiti shares the island of Hispaniola with the Dominican Republic, which is located to the east of Haiti.
- Statement 2 is incorrect. Port-au-Prince is the capital city of Haiti. It is the largest city in Haiti and serves as its capital.

Source: [The Hindu](#)

**6. Correct Answer is (A)**

- Statement 1 is correct. The Holocene epoch is characterized by a relatively stable climate that supported the development of human civilization. The Holocene epoch started around 11,700 years ago and has witnessed the growth and expansion of human societies across the globe. During this time, the Earth's climate was relatively stable, which provided a favorable environment for agriculture, settlement, and other activities that facilitated the rise of civilizations.
- Statement 2 is incorrect. The Anthropocene epoch is distinct from the Holocene epoch not because it highlights the significant human impact on the Earth's systems. The Anthropocene concept argues that human activities, such as industrialization, deforestation, and large-scale agriculture, have become the dominant force shaping the planet's climate, geology, and ecosystems. This sets the Anthropocene apart from the Holocene, which is considered a period with relatively gradual changes in climate and life on Earth.

Source: [The Hindu](#)

**7. Correct Answer is (B)**

- The Gulf of Tonkin is a body of water situated in the northern part of the South China Sea. It is bordered by China in the northwest, Vietnam in the west and southwest, and Hainan Island (a province of China) to the east. The Gulf of Tonkin has strategic and economic significance due to its location, fisheries, and potential hydrocarbon resources.

Source: [Forum IAS](#)

**8. Correct Answer is (C)**

- Oguta Lake is the largest natural lake in Nigeria, located in the state of Imo in the southeast. It is a "finger lake" formed by damming the lower Njaba River with alluvium. The lake's catchment area includes the drainage area of the Njaba River, and part of the river Niger floodplain in the region south of Onitsha.

Source: [The Hindu](#)

**9. Correct Answer is (C)**

- Statement-I is correct. India is among the water-stressed countries in the world. Water stress refers to a situation where the demand for water exceeds the available supply, leading to issues such as scarcity, droughts, and inadequate access to clean water. India's water stress is caused by factors like its large population, rapid urbanization, inefficient water management practices, and climate change impacts.

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- Statement-II is incorrect. India accounts for 18% of the world's population and about 4% of the world's fresh water resources.

Source: [The Hindu](#)

### 10. Correct Answer is (A)

- Statement 1 is correct. Critical Minerals are essential for the production of high-tech products, including smartphones, electric vehicles, and renewable energy technologies. They have unique properties that make them crucial for various applications.
- Statements 2 and 3 are incorrect. Iron ore is not typically considered a critical mineral. While iron is important for various industrial and construction applications, critical minerals usually refer to rare earth elements, precious metals, and other materials that are less abundant and more difficult to access. Examples of critical minerals include lithium, cobalt, rare earth elements, and platinum group metals. The International Energy Agency (IEA) focuses on identifying and addressing issues related to critical minerals. The IEA recognizes the importance of critical minerals in the transition to clean energy and the need to ensure their sustainable and secure supply.

Source: [The Hindu](#)

### 11. Correct Answer is (C)

- Cotton is an important fiber crop grown in India, primarily as a Kharif crop. It thrives in warm and humid conditions and has specific climatic requirements:
- Cotton is grown as a Kharif crop in India, with sowing typically done in the months of April-May, and harvesting occurring between September-November.
- It requires temperatures ranging between 21°C and 30°C for optimal growth.
- Cotton plants need around 200 frost-free days to mature and produce good quality fiber.
- Rainfall during the growing season should ideally range between 50-75 cm, as excessive rainfall can adversely affect the quality of the fiber.

Source: [The Hindu](#)

### 12. Correct Answer is (D)

- The South China Sea is a marginal sea located in Southeast Asia, bordered by several countries. The countries that border the South China Sea include: China, Vietnam, Indonesia, Philippines, Malaysia, Brunei, Taiwan, and Singapore.

Source: [The Hindu](#)

## Polity

### 13. Correct Answer is (A)

- Statement 1 is correct. The Constitution envisions the Election Commission of India (ECI) as an independent body responsible for conducting free and fair elections. Article 324 of the Constitution establishes the ECI, consisting of the Chief Election Commissioner (CEC) and two other Election Commissioners, to ensure the integrity of the electoral process.
- Statement 2 is incorrect. Under the Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Service and Term of Office) Act, 2023, a three-member Selection Committee comprising the Prime Minister, Cabinet Minister, and Leader of Opposition in Lok Sabha (or leader of the single largest opposition party) will select Election Commissioners for the appointment. A Search Committee headed by the Cabinet Secretary will suggest five names to the Selection Committee. The Selection Committee may consider any person other than those suggested by the Search Committee.

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Source: [The Hindu](#)

### 14. Correct Answer is (A)

- Statement 1 is correct. Non-Personal Data (NPD) is a primary kind of citizen data obtained by the government, which has the potential to serve as a 'public good' when utilized effectively for policy-making, service delivery, and other purposes that benefit society.
- Statement 2 is incorrect. Unlike Personal Data, there is an absence of regulation for NPD. As of date, efforts have been made at the executive level to construct governance policies for the same. This means NPD in India as of now is unregulated.

Source: [The Hindu](#)

### 15. Correct Answer is (A)

- Statement 1 is correct. The Election Commission of India (ECI) is responsible for the allotment of symbols to political parties. The ECI assigns symbols to both recognized national and state parties as well as registered but unrecognized parties.
- Statement 2 is incorrect. In any electoral constituency across India, a candidate representing a National Party is typically assigned the party symbol. A candidate fielded by a National Party in any election constituency across India must select and will be assigned the symbol exclusively reserved for that party, without any alternative symbol allocation.

Source: [The Times of India](#)

### 16. Correct Answer is (C)

- Statements 1 and 2 are correct. Under the Constitution, the terms of both state Assemblies and Lok Sabha is for five years from the first sitting of the House. The term of the state assembly may be extended by Parliament when there is a proclamation of Emergency. However, the extension cannot exceed one year at a time and once the Proclamation has ceased to operate, the extension cannot be given beyond a period of six months, in any case.

Source: [Forum IAS](#)

### 17. Correct Answer is (A)

- Statement 1 is correct. A judge in India retires from the High Court at the age of 62 years, as per the Constitution of India.
- Statement 2 is incorrect. There is no such constitutional provision mandating a cooling-off period for retired judges before they can join a political party. However, there are ethical considerations and potential conflicts of interest that are debated when retired judges enter politics.

Source: [The Hindu](#)

### 18. Correct Answer is (C)

- Statements 1 and 2 are correct. The Model Code of Conduct (MCC) can be considered a rulebook for political parties and leaders during elections in India. It aims to ensure free and fair elections, maintain a level playing field for all parties, and prevent any unethical or unfair practices. The MCC stipulates that when the "time of election silence" begins (usually 48 hours before the polling date), no campaigning activities are permitted. This allows for a cooling-off period before voters' head to the polls, giving them time to make informed decisions without being influenced by last-minute campaigning efforts.

Source: [DNA](#)

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### 19. Correct Answer is (B)

- The primary responsibility of the Directorate General of Civil Aviation (DGCA) in India is to oversee the safety and security of civil aviation. DGCA is the regulatory body for civil aviation in India, responsible for ensuring the safety, security, and efficiency of air transport.

Source: [The Times of India](#)

### Acts & Policies

### 20. Correct Answer is (B)

- Statements 1 and 2 are correct. GeM aims to significantly reduce human interaction in the processes. Its digital architecture automates vendor registration, the creation of product/service listings, order placement, and payment processing. This increased automation enhances transparency and efficiency. The Indian government has made it mandatory for sellers to display the 'country of origin' on products to be sold on the GeM portal. This move aimed to promote the 'Make in India' initiative and provide transparency to buyers regarding the origin of products they intend to purchase.
- Statement 3 is incorrect. GeM does not limit the entry of foreign bidders into the Indian market. Instead, it facilitates the participation of foreign bidders in government procurement, promoting competition and providing access to a larger pool of suppliers. However, foreign bidders need to comply with the relevant rules and regulations governing government procurement in India.

Source: [The Hindu](#)

### 21. Correct Answer is (B)

- 2 and 3 are correctly matched. Operation Dost (Operation Friend) was the search and rescue operation initiated by the Government of India to aid Syria and Turkey, after the 2023 Turkey–Syria earthquake devastated both countries on 6 February 2023. Recently, India has launched 'Operation Indravati' to evacuate its citizens stranded in war-torn Haiti amid the intense fighting between the armed groups and the government.

Source: [The Times of India](#)

### Index & Reports

### 22. Correct Answer is (B)

- Statements 1 and 2 are correct. The World Happiness Report 2024 indicates that none of the world's largest countries, such as China, India, or the United States, are among the happiest countries. Smaller nations, particularly the Nordic countries like Finland, Denmark, Iceland, and Sweden, continue to dominate the top rankings. The report found that younger generations were happier than their older peers in some regions of the world, including Latin America, the Caribbean, and Sub-Saharan Africa. However, this trend does not apply universally to all regions.
- Statement 3 is incorrect. India's ranking in the World Happiness Report 2024 remained the same as the previous year, at 126th out of 143 countries. Despite having the world's second-largest elderly population, India's happiness ranking did not improve. The report highlights that older men, married individuals, and those with higher education levels in India reported higher life satisfaction.

Source: [The Times of India](#)

### International Relations/Organizations

### 23. Correct Answer is (B)

- Statement 1 is incorrect. The primary objectives of the Indian Ocean Rim Association (IORA) focus on promoting regional cooperation in various areas such as maritime safety and security, trade and

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investment, fisheries management, disaster risk management, tourism, and academic and cultural exchange. Resolving territorial disputes is not a stated objective of IORA.

- Statements 2 and 3 are correct. The apex body of the Indian Ocean Rim Association (IORA) is the Council of Foreign Ministers (COM), which meets annually to discuss and decide on IORA's overall direction, policy, and activities. The COM is responsible for reviewing the progress of IORA's objectives and providing guidance on its future work. The Colombo Security Conclave (CSC) is a regional security grouping focused on the Indian Ocean Region (IOR). It aims to enhance cooperation in areas such as maritime security, counterterrorism, and disaster relief.

Source: [The Hindu](#)

### 24. Correct Answer is (B)

- Statement 1 is correct. The Trade and Economic Partnership Agreement (TEPA) between India and the European Free Trade Association (EFTA) countries includes a provision that allows India to withdraw tariff concessions if the expected investment targets are not met. This arrangement aims to ensure that the agreement promotes mutual growth and benefits for both parties. TEPA sets out a target of a \$100 billion investment into India from EFTA countries, and consequent one million jobs over a 15-year period. It also provides India the ability to withdraw its tariff concessions if such expected investment is not achieved.
- Statements 2 and 3 are incorrect. The tariff concessions under the TEPA do not apply to gold imports from EFTA countries to India. The agreement primarily focuses on boosting trade in goods and services, intellectual property rights, and investment. Gold, which accounts for 80% of the merchandise imports from EFTA countries, as well as dairy, soya, coal and some sensitive agricultural products have been excluded from India's tariff concession list. India's exports to EFTA countries are unlikely to be significantly impacted because most products already face low or zero tariffs under the Most Favoured Nation (MFN) status. For instance, approximately 98% of India's \$1.3 billion merchandise exports to Switzerland consist of industrial products with zero tariffs, while the remaining 2% are agricultural products with minimal trade values.

Source: [The Hindu](#)

### 25. Correct Answer is (A)

- Statements 1 and 3 are incorrect. The Indo-Pacific Economic Framework (IPEF) does not aim to establish a traditional free trade agreement with strict tariff reductions among member countries. Instead, it focuses on setting standards and policies in various areas, including digital trade, supply chain resilience, clean energy, and labor rights, to promote a more level playing field and foster cooperation among member countries. Participation in IPEF is independent of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). CPTPP is a separate free trade agreement with different members. Some IPEF members are also in CPTPP, but not all.
- Statement 2 is correct. Fair and Resilient Trade is one of the pillars of the IPEF. This pillar aims to promote high-standard, inclusive, free, and fair-trade commitments that support a robust and resilient supply chain, as well as sustainable economic growth for all member countries. IPEF has four pillars: trade, supply-chain resilience, clean economy, and fair economy (tax and anti-corruption) under the economic initiative. Except for India and Malaysia, the rest of the countries have joined all four pillars.
- Note: India has recently decided to participate in one of the cooperative work programmes introduced under the 'clean energy pillar' of the IPEF.

Source: [The Hindu](#)

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### 26. Correct Answer is (C)

- The World Meteorological Organization (WMO) is a specialized agency of the United Nations (UN). The WMO's primary purpose is to facilitate international cooperation in atmospheric sciences, climate, hydrology, and related disciplines, including the coordination of global weather and climate monitoring, research, and the standardization of meteorological measurements and terminology.

Source: [The Hindu](#)

### 27. Correct Answer is (B)

- A treaty is a formal, legally binding agreement between states or other international legal entities, governed by international law. Once ratified, states are obligated to adhere to the terms of a treaty. A UN resolution, on the other hand, is a formal expression of the opinion or will of the United Nations organs, such as the UN Security Council or General Assembly. While UN resolutions are not legally binding, they carry significant political weight and can influence state behavior. Member states are expected to follow the recommendations in these resolutions, but they are not legally obligated to do so.

Source: [The Times of India](#)

### 28. Correct Answer is (B)

- Statement 1 is incorrect. IPHE's primary goal is to facilitate and accelerate the transition to clean and efficient energy and mobility systems using hydrogen and fuel cell technologies across applications and sectors. It aims to promote and advance research, development, and deployment of hydrogen and fuel cell technologies.
- Statements 2 and 3 are correct. IPHE consists of 23 member countries and the European Commission. The member countries include major economies such as the United States, Japan, Germany, China, South Korea, Canada, and India. It facilitates the sharing of information on policies, technology status, initiatives, codes, and standards among member countries to promote the cost-effective transition to using fuel cells and hydrogen in the economy.

Source: [Forum IAS](#)

### 29. Correct Answer is (C)

- Statements 1 and 3 are correct. The UNSC consists of 5 permanent member states (China, France, Russia, the United Kingdom, and the United States) and 10 non-permanent member states that are elected for 2-year terms by the United Nations General Assembly. Approving the admission of new member states to the United Nations is not a power specifically assigned to the UNSC. The admission of new members is determined by the United Nations General Assembly upon the recommendation of the Security Council. The UNSC's role is to evaluate and provide recommendations on membership applications, but the final decision is made by the General Assembly, which needs a two-thirds majority vote to admit a new member state.
- Statement 2 is incorrect. The concept of "veto power" in the UNSC refers to the ability of the 5 permanent member states to block the adoption of resolutions that are brought to the Council. A negative vote or "veto" from any of the permanent members can prevent the adoption of a resolution, even if all other members support it. The Secretary-General does not have veto power in the Security Council.

Source: [The Hindu](#)

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### 30. Correct Answer is (B)

- The primary objective of the Shanghai Cooperation Organisation (SCO) Startup Forum is to foster collaboration and innovation amongst SCO member states' startups. The SCO Startup Forum aims to promote cooperation and exchange of knowledge between startups from SCO member countries. It seeks to encourage innovation, create job opportunities, and provide mentorship to entrepreneurs, helping them to scale up their businesses and contribute to the economic development of the member states.

Source: [Forum IAS](#)

### 31. Correct Answer is (B)

- Statement 1 is incorrect. The ITU is a specialized agency of the United Nations (UN) responsible for issues related to telecommunications and information and communication technologies (ICTs). It coordinates global efforts between governments and private sector entities in the telecommunications industry.
- Statement 2 is correct. One of the primary functions of the ITU is to manage and allocate radio spectrum frequencies for various purposes, such as broadcasting, satellite communication, mobile networks, and aeronautical and maritime navigation. This helps prevent interference and ensures efficient use of the limited frequency resources available globally.

Source: [Forum IAS](#)

### 32. Correct Answer is (B)

- Statement 1 is incorrect. Bhutan has not joined China's Belt and Road Initiative (BRI). It is the only India's neighbour that is not a part of BRI.
- Statements 2 and 3 are correct. India is Bhutan's top trading partner and the main source of investment. The two countries share close economic ties, and India plays a significant role in Bhutan's socio-economic development. India remains Bhutan's top trading partner and also the main source of investment, accounting for 50% of FDI. There has also been a focus on increasing cooperation in newer areas like space, fintech and e-learning. India and Bhutan have extended their cooperation to digital projects like RuPay and BHIM, facilitating financial linkages between the two countries. The collaboration aims to promote digital financial services and strengthen bilateral economic relations.

Source: [The Times of India](#)

## Economy

### 33. Correct Answer is (C)

- The term "blue chip" refers to stocks of companies that are well-established and financially stable with a long history of success. Blue-chip stocks are typically associated with large, reputable, and financially sound companies that have demonstrated consistent performance and growth over an extended period. These companies are often market leaders in their respective industries and are considered relatively safe investments due to their track record of weathering economic challenges.

Source: [The Hindu](#)

### 34. Correct Answer is (B)

- Core inflation is calculated by excluding certain volatile components, such as food and energy prices, to better capture the underlying trend of inflation in an economy. This exclusion helps provide a clearer picture of the long-term inflation trend, making it a more reliable indicator for policymakers.

Source: [The Hindu](#)



**35. Correct Answer is (A)**

- **Benchmark interest rate:** This is the rate at which the central bank lends money to commercial banks. It acts as a reference point for other interest rates in the economy.
- **Impact on borrowing rates:** When the central bank lowers its benchmark rate, it becomes cheaper for commercial banks to borrow money. This, in turn, leads them to lower interest rates on loans given to businesses and individuals. So, borrowing rates decrease.
- **Bond Yields:** Bonds are a form of debt, and their yield represents the return investors get. When interest rates go down, the existing bonds (with higher fixed interest rates) become more attractive. This increases demand for those bonds, driving their prices up and, consequently, lowering their yields.

Source: [The Hindu](#)

**36. Correct Answer is (D)**

- Statements 1, 2 and 3 are incorrect. Infrastructure Investment Trusts (InvITs) are not solely debt financing mechanisms. They are investment schemes similar to mutual funds that pool money from various investors, including both debt and equity components, to finance infrastructure projects, providing a diversified investment portfolio. InvITs are regulated by the Securities and Exchange Board of India (SEBI). Investors in InvITs do not receive guaranteed fixed returns. The returns are based on the performance of the underlying infrastructure projects, which may be subject to various market, regulatory, and operational risks. Investors may receive periodic distributions of cash flows generated by the underlying infrastructure assets, but these distributions are not guaranteed and can fluctuate over time.

Source: [The Hindu](#)

**37. Correct Answer is (C)**

- Statement 1 is incorrect. Minimum Support Price (MSP) is not the minimum price at which farmers are legally allowed to sell their crops. It is a benchmark price set by the government to ensure a minimum level of income for farmers. If market prices fall below MSP, the government procures the crop from farmers at MSP to support them. MSP is not a legally mandated minimum price.
- Statements 2, 3 and 4 are correct. The MSP is announced annually for 23 crops covering both the kharif and rabi seasons, well in advance of sowing, with 21 of them being food crops. These crops include paddy, wheat, maize, pulses, oilseeds, and some other cash crops. The MSP system has played a crucial role in safeguarding food security in India. By providing a guaranteed price for farmers, it incentivizes the production of key staple crops such as rice and wheat, which helps ensure sufficient domestic food supply. Only 6% of farmers, primarily those cultivating paddy and wheat in States such as Punjab, benefit from MSP.

Source: [The Hindu](#)

**38. Correct Answer is (A)**

- When the US Federal Reserve raises interest rates, it typically makes borrowing more expensive for US businesses and consumers. This, in turn, can attract foreign capital seeking higher returns, leading to an appreciation of the US Dollar relative to other currencies, including the Indian Rupee. As a result, Indian businesses and consumers may find it more expensive to borrow funds from international markets and repay US Dollar-denominated debts, causing an increase in borrowing costs.

Source: [The Times of India](#)

**39. Correct Answer is (B)**

- When the U.S. dollar weakens, it often leads to an increase in global gold prices for several reasons:
- Gold is predominantly priced in U.S. dollars on international markets. When the dollar weakens, investors holding other currencies can purchase gold at a relatively cheaper price, increasing demand for the precious metal.
- Gold is considered a safe-haven asset and a hedge against inflation, currency devaluation, and financial market instability. When the U.S. dollar weakens, investors tend to move their capital into safe-haven assets like gold, pushing its prices higher.
- A weaker U.S. dollar can lead to concerns about the stability of the global financial system, further boosting demand for gold as a store of value and a safe-haven investment.

Source: [The Times of India](#)

**40. Correct Answer is (A)**

- The Securities and Exchange Board of India (SEBI) is the regulatory body that oversees Exchange-traded funds (ETFs) in India. Its responsibilities include: Formulating regulations and guidelines for ETFs, Approving and registering ETFs, Monitoring and supervising the activities of ETF providers, Protecting the interests of investors in ETFs.

Source: [The Hindu](#)

**41. Correct Answer is (A)**

- Real GDP is a measure of a country's economic output that has been adjusted to account for changes in the price level (inflation or deflation). It reflects the actual quantity of goods and services produced within a country, rather than the nominal value of those goods and services. By removing the effects of inflation, Real GDP provides a more accurate picture of a country's economic growth and standard of living over time.

Source: [The Hindu](#)

**Environment**

**42. Correct Answer is (A)**

- Statements 1 and 2 are incorrect. The Namdapha Tiger Reserve is situated in the state of Arunachal Pradesh in northeastern India. Namdapha Tiger Reserve is India's easternmost tiger reserve. It harbours the northernmost lowland evergreen rainforests. It is the fourth largest national park in India. It is a biodiversity hotspot in the Eastern Himalayas.
- Statement 3 is correct. The Noa Dihing River flows through the Namdapha Tiger Reserve from east to west.

Source: [The Hindu](#)

**43. Correct Answer is (A)**

- Statement 1 is correct. The principles of equity and common but differentiated responsibilities are indeed enshrined in the United Nations Framework Convention on Climate Change (UNFCCC). These principles recognize the varying responsibilities, capabilities, and circumstances of different countries in addressing climate change, with developed countries taking the lead in mitigating greenhouse gas emissions.
- Statement 2 is incorrect. The Intergovernmental Panel on Climate Change (IPCC) uses Integrated Assessment Models (IAMs) to analyze possible future scenarios for the energy and climate systems, as well as economies. IAMs are essential tools that help the IPCC explore various pathways and assess the potential outcomes of different climate change mitigation and adaptation strategies. IAMs

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are complex models that examine possible futures of the energy and climate system and economies. Its macroeconomic models can point to future growth levels in terms of GDP; its energy models can project future consumption; vegetation models can examine land-use changes; and earth-system models use the laws of physics to understand how climate evolves. With such integration across disciplines, IAMs are meant to provide policy-relevant guidelines on climate action.

Source: [The Hindu](#)

### 44. Correct Answer is (C)

- Statements 1 and 2 are correct. Minerals like lithium, cobalt, and copper are essential for clean energy technologies such as electric vehicles (EVs) and energy storage systems. Lithium is a key component in the production of lithium-ion batteries used in EVs and energy storage, while cobalt is used in the cathodes of lithium-ion batteries. Copper is essential for the manufacturing of EVs, solar panels, and wind turbines due to its high electrical conductivity. Despite significant investments in renewable energy, India still receives support from the World Bank to accelerate its transition towards renewable energy sources. The World Bank has provided financing for solar park expansion, rooftop installations, low-carbon energy development, and power-sector reforms in Himachal Pradesh. This support demonstrates the World Bank's commitment to assisting India in achieving its sustainable development goals.

Source: [The Hindu](#)

### 45. Correct Answer is (B)

- Statement 1 is incorrect. Shipping, which transports around 90% of world trade, accounts for nearly 3% of the world's carbon dioxide emissions.
- Statement 2 is correct. The International Maritime Organization (IMO) emission reduction target from international shipping includes:
- 2030: At least a 20% reduction in absolute GHG emissions compared to 2008 levels, and "striving for" a 30% reduction
- 2040: At least 70% reduction in GHG emissions below 2008 levels, and "striving for" 80% reduction
- 2050: Net-zero GHG emissions

Source: [The Hindu](#)

### 46. Correct Answer is (C)

- Statements 1 and 3 are correct. The Vechur cow is a rare breed of cattle indigenous to Kerala, specifically from the Vechur village in Kottayam district. It is the smallest cattle breed in the world and is known for its high milk-producing capacity despite its small size. The White Revolution, which focused on increasing milk production in India through cross-breeding of indigenous cows with high-yielding foreign breeds, led to a decline in the Vechur population.
- Statement 2 is incorrect. They are known for being the smallest cattle breed in the world.

Source: [The Hindu](#)

### 47. Correct Answer is (D)

- Statements 1, 2 and 3 are correct. The Great Indian Bustard (*Ardeotis nigriceps*) is one of the heaviest flying birds, endemic to the Indian subcontinent. It is a large, terrestrial bird that is well-adapted to arid and semi-arid landscapes. It lives in arid and semi-arid grasslands, with a preference for open, dry and uncultivated areas. It is categorized as "Critically Endangered" in the IUCN (International Union for Conservation of Nature) Red List of Threatened Species.

Source: [The Times of India](#)

**48. Correct Answer is (C)**

- Statements 1 and 3 are correct. North Atlantic right whales primarily occur in Atlantic coastal waters on the continental shelf, which is a relatively shallow underwater landmass that surrounds continents. They are known to inhabit areas along the eastern coast of North America, from Canada to Florida, USA. North Atlantic right whales have a distinctive appearance, characterized by their stocky black bodies and the absence of a dorsal fin. They also have rough patches of skin called callosities on their heads, which appear white due to whale lice and can help identify individual whales.
- Statement 2 is incorrect. North Atlantic right whales are listed as "Critically Endangered" on the IUCN Red List of Threatened Species.

Source: [The Hindu](#)

**49. Correct Answer is (C)**

- Statements 1 and 3 are correct. Ranthambore National Park is located in Sawai Madhopur district of Rajasthan. It is located at the junction of the Aravali and Vindhya hill ranges, in the southeastern part of Rajasthan, India. This unique location contributes to the park's diverse flora and fauna. The Kailadevi Wildlife Sanctuary and Sawai Mansingh Wildlife Sanctuary are connected to the core of Ranthambore National Park. Together, these areas form the larger Ranthambore Tiger Reserve, which is crucial for the conservation of the endangered Bengal tiger and other wildlife species.
- Statement 2 is incorrect. Ranthambore National Park is bounded to the north by the Banas River and to the south by the Chambal River.

Source: [Forum IAS](#)

**50. Correct Answer is (C)**

- Biomining of Legacy Waste is a process where microorganisms are used to break down and extract valuable resources from old landfill sites, such as metals and minerals, in an environmentally sustainable manner. It involves excavation of legacy waste, stabilizing the waste using bioremediation, segregation of excavated waste and then sustainable management and its safe disposal. The methods of biomining include Bioleaching, Bio-oxidation, Dump leaching, and Agitated leaching. Biomining allows to recycle resources by extracting useful components from the waste such as metal, as compost in fertilizer, etc. It is eco-friendly, environmentally sustainable, and after using this technique, it can be used as the contaminated land for other purposes.

Source: [Forum IAS](#)

**51. Correct Answer is (A)**

- Statement 1 is correct. Microplastics are defined as any solid plastic particle that is insoluble in water and has dimensions ranging from 1  $\mu\text{m}$  (micrometer) to 1,000  $\mu\text{m}$  (or 1 mm). These tiny plastic particles can originate from various sources, including the breakdown of larger plastic debris, synthetic textile fibers, and microbeads found in personal care products. Microplastics pose a significant threat to aquatic ecosystems and can also accumulate in the food chain, causing potential harm to human health.
- Statement 2 is incorrect. Biodegradable plastics are plastics that can be broken down by living organisms, such as bacteria or fungi, within a reasonable timeframe. They are designed to decompose naturally in the environment, reducing the long-lasting impact of traditional, non-biodegradable plastics. Biodegradable plastics are not necessarily plastics that can be recycled multiple times without degradation. Instead, biodegradable plastics are designed to break down naturally into

harmless substances such as water, carbon dioxide, and biomass under specific environmental conditions.

Source: [The Hindu](#)

### Science & Technology

#### 52. Correct Answer is (A)

- Neutrinos are often called "ghost particles" because they have almost no mass, no electric charge, and interact very weakly with other matter. This makes them extremely difficult to detect and study. They can pass through ordinary matter, such as the Earth, without being affected. They are extremely difficult to detect, making them seem elusive or ghost-like. Neutrinos are produced in various astrophysical phenomena, such as nuclear reactions in the Sun, supernovae explosions, and cosmic ray interactions, and they constantly bombard the Earth in vast numbers. However, they are not detected.

Source: [The Hindu](#)

#### 53. Correct Answer is (A)

- The Hemoglobin A1C test (HbA1C) is used to measure diabetes. It is a blood test that provides information about an individual's average blood sugar (glucose) levels over the past two to three months. HbA1C measures the percentage of hemoglobin in the blood that has glucose attached to it. Higher HbA1C levels indicate a greater risk of developing diabetes or poor management of the condition in individuals who already have diabetes.

Source: [The Hindu](#)

#### 54. Correct Answer is (B)

- The primary purpose the SAKHI app onboard the spacecraft is providing real-time information and assistance to astronauts. It is an AI-based mobile app developed by IN-SPACe to assist astronauts during space missions. It can collect and process data from various sensors on the spacecraft, keeping astronauts informed of their environment and potential issues.

Source: [The Hindu](#)

#### 55. Correct Answer is (C)

- The primary focus of the Tiger Triumph exercise is Humanitarian Assistance and Disaster Relief (HADR) operations. Tiger Triumph is a bilateral military exercise conducted by the United States and India, aiming to enhance interoperability, cooperation, and understanding between the two nations' armed forces.

Source: [The Hindu](#)

#### 56. Correct Answer is (B)

- Statement 1 is incorrect. Ballistic missiles do not fly at low altitudes or follow a flat and level trajectory. Instead, they follow a parabolic or ballistic trajectory, which involves being launched into a high altitude and then descending towards the target.
- Statements 2 and 3 are correct. Multiple Independently Targetable Re-entry Vehicles (MIRVs) technology can help evade ballistic missile defenses. MIRVs allow a single missile to carry and deliver multiple warheads, each capable of hitting different targets, making it more challenging for missile defense systems to intercept and destroy all incoming warheads. The Agni-5 is the longest-range missile India has tested so far, with an estimated range of over 7,000 kilometers. This solid-fueled,

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three-staged missile was first tested by India in 2012, and it incorporates MIRV technology, which India successfully tested recently.

Source: [The Hindu](#)

### 57. Correct Answer is (A)

- Statement 1 is correct. AI models undergo training on extensive datasets and have limitations in independent operation whereas an AI Agent has the ability to process data and take actions autonomously.
- Statement 2 is incorrect. Alexa, developed by Amazon, is an example of an AI Agent. AI Agent use AI models to help make decisions, but they also add extra layers of logic, learning, or planning to handle complex situations.

Source: [Forum IAS](#)

### 58. Correct Answer is (B)

- Statements 1 and 2 are correct. Double Asteroid Redirection Test (DART) Mission was a NASA space mission designed to test a method of planetary defense against near-Earth objects (NEOs). Its main purpose was to assess the effectiveness of using a kinetic impactor spacecraft to alter the trajectory of an asteroid. It was the first to demonstrate the asteroid deflection technique using a kinetic impactor spacecraft. On September 26, 2022, the spacecraft successfully collided with the asteroid Dimorphos, a moonlet orbiting the larger asteroid Didymos, in an attempt to change its orbital period.
- Statement 3 is incorrect. The DART mission's success criteria did not involve completely altering the orbit of Dimorphos. Instead, the primary objective was to change Dimorphos' orbital period by at least 73 seconds, which would indicate a measurable deflection. The mission aimed to assess the feasibility of using a kinetic impactor spacecraft for planetary defense against potentially hazardous asteroids, not to drastically alter their orbits.

Source: [The Hindu](#)

### 59. Correct Answer is (B)

- Statement 1 is incorrect. Disease elimination refers to the reduction of cases to zero in a specific geographic area. While the ultimate goal may be permanent elimination, there can always be a risk of reintroduction from other areas where the disease persists. The term eradication refers to the permanent, global reduction of cases to zero.
- Statements 2 and 3 are correct. Guinea worm disease (GWD), also known as dracunculiasis, is a parasitic disease caused by drinking water contaminated with parasite-infected copepods (tiny water fleas). The parasitic worm, *Dracunculus medinensis*, grows inside the human body, causing pain and swelling when the female worm emerges to release larvae. Planning for disease elimination should involve a careful analysis of costs and benefits to ensure that the intervention strategies are cost-effective and sustainable. This helps public health decision-makers prioritize resource allocation and evaluate the potential impact of elimination efforts on overall health outcomes.

Source: [The Hindu](#)

### 60. Correct Answer is (C)

- Statements 1, 2 and 4 are correct. Nuclear power emits four times less carbon than solar farms or other renewable sources such as wind, hydropower, and geothermal. Nuclear power has the capacity to supply uninterrupted energy irrespective of geographical constraints making it a crucial component of the wider renewable energy mix. Despite its versatile nature, nuclear power

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contributes only 1.6% of the total renewable energy mix in India. Stigma, weaponisation risk, radiation leak, regulation, high upfront cost, and long project overruns are the reasons for low adoption rate of nuclear energy.

- Statement 3 is incorrect. Nuclear power plants (NPP) have low operating costs, smaller land imprint and a longer life cycle compared to all the other renewable energy sources.

Source: [The Hindu](#)

