

# 10 PM Current Affairs Quiz Weekly Compilation

For UPSC CSE Prelims

[1st Week] March, 2024

#### Index

Art & Culture and Ancient History	
Modern Indian History	
Geography	
Polity	
Acts & Policies	
International Relations/Organizations	
Economy	
Environment	
Science & Technology	
Answer Key	
Answers & Explanations	

#### **Art & Culture and Ancient History**

## Q.1) With reference to Morodharo, a Harappan-era fortified settlement, consider the following statements:

- 1. The settlement is located near Rakhigarhi in Haryana.
- 2. Burial cairns, which are mounds of stones to demarcate a boundary, are found here.

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

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

#### Q.2) Paruveta Utsavam festival is celebrated in:

- a) Punjab
- b) Assam
- c) Andhra Pradesh
- d) Kerala

#### Q.3) Consider the following tribes:

- 1. Shompen
- 2. Onges
- 3. Jarawas
- 4. Birjia

#### How many of the tribes mentioned above are indigenous to the Andaman and Nicobar Islands?

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

#### Q.4) In the context of the Indian Ancient History, 'Herjunka' refers to:

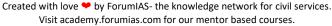
- a) A type of taxes on goods
- b) Land granted to religious institutions
- c) A type of cooperative organization
- d) Land tenure system

#### Q.5) With reference to Sant Ravidas, consider the following statements:

- 1. Sant Ravidas Jayanti is celebrated every year on Magh Purnima on full moon day of Magh month.
- 2. He is considered a prominent figure of the Bhakti Movement.
- 3. According to Sant Ravidas, the path to salvation lies in accumulating knowledge from scriptures.
- 4. He became a symbol of opposition to untouchability.

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

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





#### Q.6) Purple Fest 2024 was held recently at Rashtrapati Bhavan. It focuses on:

- a) Celebrating Indian culture and heritage
- b) Showcasing advancements in disability technology
- c) Raising awareness about mental health issues
- d) Raising awareness about different disabilities and their impact on people's lives

#### **Modern Indian History**

#### Q.7) Consider the following statements:

- 1. Rani Chennamma led an armed rebellion against the British East India Company due to the violation of the trade agreement by the British East India Company.
- 2. Kittur Utsav is a three-day festival which celebrates the Queen Rani Chennamma's victory over East India's company in 1824.

#### 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.8) Which one of the following statements is NOT correct regarding Vaitarna River?

- a) It originates in the Brahmagiri Hills of the Western Ghats.
- b) Tanya is its left bank tributary.
- c) It is the largest river in the Northern Konkan region.
- d) It is one of the west flowing rivers.

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

- 1. It requires high temperature throughout the year ranging between 20°-35°C.
- 2. It requires heavy rainfall around 200 cm.
- 3. Deep, friable, well-drained soils are ideal for its growth.

#### Which one of the following crops requires the above climatic conditions?

- a) Millets
- b) Pulses
- c) Rubber
- d) Wheat

#### Q.10) With reference to the Ponmudi hills, how many of the following statements are correct?

- 1. It is part of the Eastern Ghats Mountain range.
- 2. It is located in Telangana.
- 3. These hills are rich in biodiversity.

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

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



#### Q.11) Rip currents are:

- a) Powerful currents that flow away from the shore in the ocean.
- b) Strong currents that move parallel to the shoreline.
- c) Slow-moving currents that deposit sand on beaches.
- d) Underwater tunnels formed by wave erosion.

#### Q.12) With reference to the country Papua New Guinea, consider the following statements:

- 1. It is the largest island country in the world.
- 2. It is a constitutional monarchy and part of the Commonwealth.
- 3. Indonesia lies in its western side.

#### 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.13) With reference to the Pigeon pea (Tur), consider the following statements:

- 1. It prefers well-draining, loamy to sandy soils for growth.
- 2. Cool and temperate climate with consistent rainfalls is most favorable for the cultivation of pigeon pea.
- 3. In India, around 80-90% of pigeon pea is intercropped.

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

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

#### Q.14) Kiru Hydel Project is being developed over the -

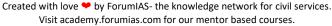
- a) River Godavari
- b) River Narmada
- c) River Chenab
- d) River Kaveri

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

- 1. Sweden is the largest country in terms of land area among the Nordic-Baltic countries.
- 2. All Nordic-Baltic countries are members of the European Union.
- 3. Poland is one of the Nordic-Baltic countries.

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

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





#### Q.16) Consider the following statements:

- 1. The Badwater Basin is located at Yellowstone National Park in the North America.
- 2. The Badwater Basin is known as the lowest point in North America.
- 3. Death Valley has extreme heat during summers and cool temperatures in winters.

#### 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.17) Consider the following countries:

- 1. Estonia
- 2. Latvia
- 3. Denmark

#### How many of the above countries are Nordic countries?

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

#### **Polity**

#### Q.18) Consider the following statements:

- 1. Laws and regulations based on gender bias are regarded as unconstitutional.
- 2. Article 142 empowers the Supreme Court to issue decrees or orders deemed necessary to achieve complete justice in any pending cause or matter within its jurisdiction.

#### 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.19) Pandaram lands refers to:

- a) Agricultural land
- b) Form of land ownership
- c) Land given on lease by the government
- d) Land present near water bodies



#### Q.20) With reference to the Right to Information, consider the following statements:

- 1. The right to information is the right which ensures that the public become 'citizens' rather than becoming 'subjects' in a democratic state by having access to the flow of information regarding the functioning of the different arms of the government.
- 2. The Right to information has been mentioned explicitly as a fundamental right under the Article 19 (1) (a). 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.21) Which one of the following is the significance of the Sixth Schedule in the context of Indian governance?

- a) It grants special autonomy to tribal areas and protects their customary laws and practices.
- b) It establishes a system of dual citizenship for residents of tribal areas.
- c) It provides reservation in educational institutions and government jobs for tribal communities.
- d) It outlines the process for the creation of new states and Union Territories.

#### Q.22) Consider the following statements:

- 1. Gram Sabha is the smallest and the only permanent unit in the Panchayati Raj system.
- 2. Block Panchayat holds elections for the Panchayat Samiti council seats.
- 3. Tax collection by panchayats has decreased in recent years.

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

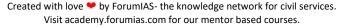
- a) Only one
- b) Only two
- c) All three
- d) None

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

- 1. Political parties registered under Section 29A of the Representation of the People Act, 1951 are required to pay taxes on their income derived from house property, and capital gains.
- 2. The Chief Executive Officer of the political party bears the responsibility for filing the income tax return.

#### 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





#### **Acts & Policies**

#### Q.24) Consider the following statements:

- 1. It will offer courses in sectors which are high in demand.
- 2. It will harness the potential of demographic dividends to promote rural development and advance socio-economic growth.
- 3. It will limit migration of Indian workers to other countries by providing financial assistance for starting small businesses.

## Which of the above statements are correct with respect to the Skill India Centre, recently inaugurated by the government?

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

#### Q.25) With reference to the National Livestock Mission (NLM), consider the following statements:

- 1. It is a scheme designed to enhance both the quantity and quality of livestock production systems.
- 2. National Dairy Development Board is responsible for implementing the National Livestock Mission (NLM).

#### 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) Which one of the following is the objective Flood Management and Border Areas Programme (FMBAP)?

- a) Developing infrastructure projects in bordering areas.
- b) Providing financial aid to border communities.
- c) Managing flood risks and protecting border areas.
- d) Resettlement of populations displaced by floods.

#### Q.27) The Pradhan Mantri Uchchatar Shiksha Abhiyan (PM-USHA) scheme is launched to:

- a) Provide scholarships to meritorious students for higher education.
- b) Promote research and development in universities and colleges.
- c) Improve the quality of education in primary and secondary schools.
- d) Enhance access, equity, and excellence in higher education.

#### Q.28) Consider the following statements with respect to the Agnipath Scheme:

- 1. It is aimed at recruiting young individuals for direct entry into the officer cadre of the military.
- 2. All recruits are hired only for a four-year period.

#### 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



#### 0.29) With reference to the Rashtriya Udyamita Vikas Pariyojana, consider the following statements:

- 1. It aims to attract foreign direct investment in India.
- 2. It also facilitates the merger and acquisition of existing businesses.
- Non-profit organizations working in the social development sector are one of its beneficiaries.

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

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

#### Q.30) Island on the Air (IOTA) Expedition Programme was seen in the news recently, is associated with:

- a) Competition in radio communication speed contests
- b) Connecting amateur radio operators with stations on islands worldwide
- c) Developing new technologies for long-distance radio communication
- d) Raising awareness about environmental issues on islands through radio communications.

#### **International Relations/Organizations**

## Q.31) In the context of Global Initiative on Digital Health (GIDH), which of the following statements are correct?

- 1. It aims to replace traditional healthcare systems with purely digital solutions.
- 2. The initiative is being led by the World Health Organization (WHO).
- 3. Digital Health includes a wide range of technologies and platforms aimed at improving access to healthcare, enhancing the quality of care.

#### 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.32) Consider the following statements with respect to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP):

- 1. One of its objectives is to negotiate trade agreements between Asia-Pacific countries.
- "Asia-Pacific SDG Progress Report" is published by the UNESCAP.
- 3. It is one of the five regional commissions of the United Nations.

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

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



#### Q.33) With reference to the Raisina Dialogue, consider the following statements:

- 1. It is India's flagship conference on geopolitics and geo-economics, committed to addressing the most challenging issues facing the international community.
- 2. It is designed on the lines of Shangri-La Dialogue.
- 3. It is organized by the World Economic Forum (WEF).
- 4. Only South Asian countries are represented at the Raisina Dialogue.

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

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

#### Q.34) With reference to the India-Greece relations, consider the following statements:

- 1. India and Greece share common approach on UN reforms and the Cyprus issue.
- 2. Greece has ratified the Framework Agreement on the International Solar Alliance (ISA).
- 3. India and Greece are both members of Shanghai Cooperation Organisation (SCO).

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

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

#### Q.35) With reference to the Energy Charter Treaty (ECT), consider the following statements:

- 1. It is an international agreement that establishes a multilateral framework for collaboration across borders in the energy sector.
- 2. One of its focus areas is to establish a common energy pricing structure globally.
- 3. The ECT safeguards foreign investments in the energy sector.
- 4. It facilitates the transfer of energy-related technologies among member states.

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

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

## Q.36) In relation to the World Trade Organization (WTO), consider the following statements regarding the 'G-33':

- 1. It emphasizes the need for special and differential treatment for developing countries in WTO agreements.
- 2. It supports the designation of certain agricultural products as "special products" for developing countries.
- 3. It promotes free trade and market liberalization in agriculture.

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

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



#### **Economy**

#### Q.37) With reference to the Rubber Board of India, consider the following statements:

- 1. It functions under the administrative control of the Ministry of Commerce and Industry.
- 2. It sets and enforce minimum wages for rubber plantation workers.
- 3. It issues licences to rubber producers, manufacturers, and exporters/traders.

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

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

#### Q.38) Consider the following statements:

- 1. It recommended maintaining the vertical devolution of divisible tax revenues at 41%.
- 2. It recommended to establish a Fiscal Oversight and Accountability Commission (FOAC) with the authority to issue binding directives to both the central government and state governments.
- 3. It recommended the fiscal deficit to be brought down to 4% of GDP by 2025-26 by the central government. Which of the above are the recommendations made by the Fifteenth Finance Commission?
- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

#### Q.39) Consider the following statements:

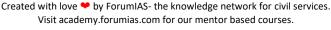
- 1. Foreign Direct Investment (FDI) is considered as a major source of non-debt financial resource for the economic development.
- 2. Under the Automatic route, FDI of up to 100% will be permitted for the manufacturing of components, systems, or sub-systems for satellites, ground segments, and user segments.

#### 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.40) In a recently conducted All India Household Consumption Expenditure Survey 2022-23, it was found that there was an increase in average monthly per capita consumption expenditure (MPCE). What does it imply?

- a) It suggests that inflation has decreased, leading to an overall reduction in the cost of goods and services.
- b) It indicates a rising disposable incomes of households, narrowing inequality between rural and urban areas, and declining poverty levels.
- c) It signifies that the population growth rate has decreased.
- d) It suggests that the cost of living in India has decreased.





## Q.41) With reference to the Primary Agricultural Credit Societies (PACS), consider the following statements:

- 1. These are government-controlled banks that provide loans to farmers at subsidized interest rates.
- 2. They provide short-term, and medium-term agricultural loans to the farmers.
- 3. PACS have the capacity to extend agricultural credit with minimal paperwork within a short time.

#### 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.42) Consider the following statements:

**Statement-I:** At present, India imports all of its required potash for fertilizers.

**Statement-II:** India lacks sufficient reserves of nitrogen and phosphorus, which are crucial components in fertilizer production.

#### 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.43) With reference to the Sudarshan Setu bridge, recently inaugurated by the Prime Minister, consider the following statements:

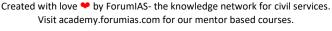
- 1. It is the country's longest cable-stayed bridge.
- 2. It connects Mandvi with Porbandar.
- 3. It is on the Arabian Sea.
- 4. The bridge was earlier known as 'Signature Bridge'.

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

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

#### 0.44) A decrease in the unemployment rate is generally associated with:

- a) Increased government spending
- b) Lower economic growth
- c) Higher consumer spending
- d) Rising inflation rates





#### Q.45) Consider the following statements:

- 1. The British constructed the first railway line in the former princely state of Jammu and Kashmir from Jammu to Sialkot.
- 2. Banihal-Sangaldan railway line is a part of the Jammu-Poonch Railway Line project.
- 3. Banihal-Sangaldan railway line includes India's longest tunnel.

#### 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

#### **Environment**

#### 0.46) With reference to the Bull Shark, which of the following statements are correct?

- 1. It is commonly found worldwide in warm, shallow waters.
- 2. It can thrive in both salt and fresh water.
- 3. They are also known as freshwater sharks.
- 4. They are categorized Vulnerable in the IUCN List of Threatened Species.

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

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

#### Q.47) In the context of the Green Anaconda, which of the following statements are correct?

- 1. They usually inhabit tropical rainforests and prefer shallow, slow-moving waters like streams, rivers, and flooded grasslands.
- 2. They are categorized as Endangered in the IUCN List of Threatened Species.
- 3. They belong to a group of snakes known as constrictors, which aren't venomous.
- 4. They are not well-adapted to the aquatic environment.

#### Select the correct statements using the codes given below:

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

#### Q.48) With reference to Cantor's Giant Softshell Turtle, consider the following statements:

- 1. These turtles are found in Southeast Asia, including parts of India.
- 2. These turtles are primarily carnivores.
- 3. They are listed Critically endangered in the IUCN 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.49) The Sub-National Climate Resilient Green Fund (SNCRGF) is a global blended finance initiative that invests in developing countries' mid-sized climate-resilient infrastructure and nature-based solutions. In which one of the following scenarios would a sub-national entity likely apply for funding from the SNCRGF?

- a) Developing a national climate policy framework
- b) Implementing a renewable energy project in a rural area
- c) Constructing a new highway network in an urban center
- d) Establishing a national climate research institute

#### Q.50) With reference to the Spotted deer, which of the following statements are correct?

- 1. It is a large species of deer, which has a particularly elegant and charming appearance.
- 2. They are most active during the dawn and dusk.
- 3. They are known for their solitary lifestyle.
- 4. These deer prefer moderate to dense forests and grasslands near water sources.

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

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

## Q.51) Which one of the following conservation statuses has the International Union for Conservation of Nature and Natural Resources (IUCN) assigned to the Bengal tiger population residing within the Kali Tiger Reserve?

- a) Critically Endangered
- b) Endangered
- c) Vulnerable
- d) Near Threatened

#### **Science & Technology**

#### Q.52) Quasars are:

- a) Massive stars nearing the end of their lifespan.
- b) Extremely luminous, distant objects powered by supermassive black holes.
- c) Large clouds of gas and dust where new stars are born.
- d) Asteroids composed of mostly ice and rock.

#### Q.53) Consider the following statements:

- 1. Rhodamine-B is a chemical commonly used for dyeing in various industries.
- 2. As per the Food Safety Standards Act, 2006, preparation, packaging, importing, selling and serving food items with Rhodamine-B in public events is a punishable offence.

#### 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.54) Consider the following statements with reference to the Brain-Computer Interface (BCI):

- 1. BCI uses telepathy to communicate with computers.
- 2. BCIs have the potential to significantly improve the quality of life for individuals suffering from neurological disorders.

#### 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.55) Consider the following statements:

- 1. Seasonal influenza (flu) is an acute respiratory infection caused by influenza viruses.
- 2. The most common mode of transmission of the influenza virus is the ingestion of contaminated food.
- 3. Influenza virus is a single-stranded RNA virus.

#### 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.56) Consider the following statements:

- 1. Cervical Cancer is primarily caused by Human Immunodeficiency Virus (HIV).
- 2. In India, cervical cancer is the second most frequent cancer among women between the ages of 15 and 44.

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

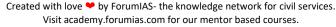
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

#### Q.57) With reference to the Cryogenic engines, consider the following statements:

- 1. Russia was the first country to developed the first operational cryogenic engine for space applications.
- 2. Cryogenic engines are particularly efficient for launching payloads into interstellar space.
- 3. It uses extremely low temperatures for propulsion.
- 4. It uses mixes of liquefied gases (usually hydrogen and oxygen), which deliver greater thrust to weight.

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

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





#### Q.58) Consider the following statements:

- 1. The CE20 cryogenic engine is an advanced propulsion system developed by ISRO.
- 2. A human rating of a spacecraft highlights the functionality of on-board scientific instruments.

#### 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.59) Which one of the following statements is correct regarding the term "Solar Maximum"?

- a) It is a sudden and intense burst of energy on the Sun's surface, often accompanied by the release of electromagnetic radiation across the entire spectrum.
- b) It is a continuous stream of charged particles (mostly electrons and protons) flowing outward from the Sun into the solar system.
- c) It refers to the period in the solar cycle when the Sun's activity is at its highest level, characterized by an increased number of sunspots, solar flares, and coronal mass ejections (CMEs).
- d) It is a massive expulsion of plasma and magnetic field from the Sun's corona into space.

#### Q.60) Which one of the following statements is correct with respect to the Ultra-processed food?

- a) It refers to foods that undergo minimal processing before consumption.
- b) These are foods that are processed with natural ingredients only.
- c) It refers to foods that undergo multiple processing stages and often contain additives.
- d) These are foods that are only prepared at home.

## Q.61) With reference to the Grey Zone Warfare, seen in the news recently, which one of the following statements is correct?

- a) The warfare primarily involves conventional military tactics and strategies.
- b) It is characterized by transparent and clearly defined rules of engagement.
- c) In this kind of warfare, nation-states and non-state actors rarely collaborate or cooperate in achieving strategic objectives.
- d) It refers to actions and operations aimed at altering the status quo in a region without provoking a full-scale military response from the targeted nation.

#### Q.62) Guinea worm disease caused by:

- a) Bacteria
- b) Virus
- c) Parasitic worm
- d) Fungus

#### **Q.63) Consider** the following statements:

- 1. Surrogacy refers to the process where a woman carries and gives birth to her own biological child.
- 2. Gametes are reproductive cells that unite during sexual reproduction to create a new individual.

#### 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.64) Consider the following statements:

- 1. Submarine Cable System is used for carrying communications by means of guided electromagnetic energy.
- 2. India's legislations do not comprehensively define submarine cable systems.

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

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

# Q.65) Calling Name Presentation (CNAP) would provide the recipient with details about the caller, similar to the functionalities of 'Truecaller' and 'Bharat Caller ID'. In which one of the following ways does CNAP work similarly to Truecaller and Bharat Caller ID?

- a) It uses facial recognition technology.
- b) It relies on a database to match phone numbers with names.
- c) It analyzes call patterns for spam detection.
- d) It requires users to register their information manually.

#### Q.66) Consider the following:

- 1. Global positioning satellites
- 2. Nuclear technology
- 3. Chemical and biological tools
- 4. Household appliances
- 5. Military radar systems

#### How many of the above items are considered as "dual-use" items?

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

#### Q.67) Which one of the following is the objective of 'Garbhini-GA2 AI Model of India'?

- a) Predicting the sex of a fetus
- b) Accurately determine fetal age during pregnancy
- c) Diagnosing potential pregnancy complications
- d) Providing personalized pregnancy advice

# Q.68) Bitcoin halving involves reducing the reward that Bitcoin miners receive for verifying transactions and adding new blocks to the blockchain by half. Which one of the following is the reason behind Bitcoin halving?

- a) It aims to increase the total supply of Bitcoins in the market.
- b) It aims to regulate the price of Bitcoin.
- c) It aims to slow down the rate at which new Bitcoins are created.
- d) It aims to improve the security of the Bitcoin network.





#### Q.69) With reference to the Gaganyaan Mission, consider the following statements:

- 1. The Crew Module of the Mission is responsible for generating power, providing propulsion for orbital maneuvers, and performing attitude control during the mission.
- 2. Human Rated LVM3 will be responsible for launching the Orbital Module into the Low Earth Orbit (LEO).

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

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

#### **Answer Key**

1 - (b)	2 - (c)	3 - (c)	4 - (a)	5 - (c)	6 - (d)	7 - <b>(b)</b>	8 - (a)	9 - (c)	10 - (a)
11 - (a)	12 - (b)	13 - (b)	14 - (c)	15 - (a)	16 - (b)	17 - (a)	18 - (c)	19 - (b)	20 - (a)
					A				
21 - (a)	22 - (b)	23 - (b)	24 - (a)	25 - (a)	26 - (c)	27 - (d)	28 - (b)	29 - (d)	30 - (b)
				A					
31 - (b)	32 - (b)	33 - (b)	34 - (a)	35 - (b)	36 - (b)	37 - (b)	38 - (c)	39 - (c)	40 - (b)
41 - (b)	42 - (c)	43 - (c)	44 - (c)	45 - (c)	46 - (c)	47 - (a)	48 - (d)	49 - (b)	50 - (c)
51 - (b)	52 - (b)	53 - (c)	54 - (b)	55 - (c)	56 - (b)	57 - (c)	58 - (a)	59 - (c)	60 - (c)
61 - (d)	62 - (c)	63 - (b)	64 - (c)	65 - (b)	66 - (b)	67 - (b)	68 - (c)	69 - (b)	



#### **Answers & Explanations**

#### **Art & Culture and Ancient History**

- 1. Correct Answer is (B)
- Statement 1 is incorrect. Archaeologists have recently discovered a Harappan-era fortified settlement named Morodharo near Dholavira. It is a fortified settlement dating back to the Harappan-era. The settlement looks mature (2,600-1,900BCE) to late (1,900-1,300 BCE) Harappan.
- Statement 2 is correct. Burial cairns, which are mounds of stones to demarcate a boundary, are fond here. Harappan pottery with perforated jar sherds, reserved slipware, and terracotta cakes were unearthed. All these items have a striking resemblance to those found in Dholavira. As per archaeologist, this site and Dholavira both were dependent on the sea. This suggests the presence of navigable waters near Rann of Kutch in ancient times.

#### **Source: Forum IAS**

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

• Paruveta Utsavam is an annual mock hunting festival held at the Sri Narasimha Swamy temple in Ahobilam, Andhra Pradesh, India. The festival serves as a testament to communal harmony. During this time, the deity from the inner sanctum of the temple is carried to the 32 Chenchu tribal settlements surrounding Ahobilam for a period of 40 days. Participants observe 'Narasimha Deeksha' by wearing yellow robes, 'Tulasi Mala, and practicing celibacy. During the ceremony, tribal members shoot arrows at the deity's palanquin as a gesture of respect and protection. Paruveta Utsavam is celebrated by people of all castes.

#### **Source: Forum IAS**

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

• The Shompen, Onge, and Jarawa tribes are native to the Andaman Islands. The Birjia tribe are a tribal community found mainly in the Indian state of Odisha, Bihar and Jharkhand. **Tribe in News:** The Shompen are designated as a Particularly Vulnerable Tribal Group within the list of Scheduled Tribe. They are one of the most isolated tribes on Earth. They are semi-nomadic hunter-gatherers, and their main sources of livelihood are hunting, gathering, fishing, and a little bit of horticultural activities in a rudimentary form. They speak their own language, which has many dialects. Members of one band do not understand the dialect of the other.

#### **Source: Forum IAS**

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

• Badami Chalukyas levied taxes called Herjunka, Kirukula, Bilkode, and Pannaya. Herjunka was a tax on loads levied by the Chalukya dynasty. The Chalukya dynasty ruled large parts of southern and central India between the 6th and the 12th centuries. Pulakesi I established the Chalukya dynasty in 550. He took Vatapi (Badami in Bagalkot district, Karnataka) under his control and made it his capital. Historians refer to Pulakesi I and his descendants as the Chalukyas of Badami. It saw the evolution and proliferation of a new style of architecture known as Vesara, a combination of the South Indian and the North Indian building styles. Their coins had Nagari and Kannada legends. They minted coins with symbols of temples, lion or boar facing right, and the lotus. They initially followed Vedic Hinduism. Later, from the time of Vikramaditya I, the people took an inclination towards Shaivism, and sects like Pashupata, Kapalikas, and Kalamukhas emerged. They also patronised Jainism. Hiuen-Tsang mentioned the Chalukya army that had hundreds of elephants, which were intoxicated with



liquor prior to the battle. Rashtrakuta inscriptions use the term Karnatabala to refer to their powerful armies. The empire was divided into Maharashtrakas (provinces), then into smaller Rashtrakas (Mandala), Vishaya (district), Bhoga (group of ten villages). Groups of mahajanas (learned brahmins) looked after agraharas. Agraharas were the place of higher learning.

**Source:** Forum IAS

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

- Sant Ravidas: He was a mystic poet saint of the Bhakti Movement from the 15th and 16th centuries, and founded the Ravidassia religion. He was a revered poet and a renowned philosopher. He was born in 1377 CE in Seer Govardhanpur in Uttar Pradesh. His place of birth is now known as Shri Guru Ravidass Janam Asthan. Despite belonging to a community whose initial occupation was in leatherwork, Ravidas shifted his focus to spiritual pursuits, spending much of his time on the banks of the Ganges. Throughout his life, he associated with Sufi saints, sadhus, and ascetics. Since his birth, Guru Ravidas devoted his life to advocating for human rights and equality. He is one of the most famous personalities of the nirguna sampradaya (sant parampara) and was one of the prominent leaders of the North Indian Bhakti movement. Sant Ravidas Jayanti or birthday anniversary is celebrated every year on Magh Purnima on full moon day of Magh month. On this special day, a ceremony of Nagar Kirtan procession is performed by people with the chants of mantras during Aarti.
- Statement 3 is incorrect. Sant Ravidas did not believe that the path to salvation lies in accumulating knowledge from scriptures. He focused on spiritual and social messages through his poetry to reform minds and promote boundless love towards God. He emphasized the importance of inner realization and experience over solely relying on scriptural knowledge. He advocated for equality and rejected the notion that one's birth determines their spiritual worth.

**Source: Forum IAS** 

#### 6. Correct Answer is (D)

• Purple Fest is an annual event organized by the National Centre for Promotion of Employment for Disabled People (NCPEDP) in collaboration with various partners. The event aims to promote inclusion and raise awareness about different disabilities, their impact on people's lives, and the need for equal opportunities and rights for people with disabilities. It will showcase best practices in the disability field, focusing on enhancing accessibility and addressing implementation challenges in various disability schemes and programs. Department of Empowerment of Persons with Disabilities, Ministry of Social Justice & Empowerment, Government of India presented Purple Fest 2024 at Rashtrapati Bhawan. It was a first-of-its-kind inclusive festival in India.

**Source: Forum IAS** 

#### **Modern Indian History**

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

- Statement 1 is incorrect. Rani Chennamma was an Indian freedom fighter and Rani of the Kittur, a former princely state in Karnataka. She led the Kittur revolt of 1824, which stands as one of the earliest woman-led anti-colonial struggles against British rule in India. She initiated a rebellion against the British in 1824 after they declined to acknowledge her adopted son as the successor according to the 'doctrine of lapse'.
- Statement 2 is correct. Kittur Utsav is a three-day festival celebrated annually in Karnataka, India, to commemorate Rani Chennamma's fight against the British East India Company in 1824. Although she was initially successful, the British captured Kittur Fort in their third attempt in December 1824, resulting in Rani Chennamma's imprisonment and eventual death in 1829.



**Source: Forum IAS** 

#### Geography

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

• Vaitarna River: The Vaitarna river rises in the Sahyadri hill range in the Nasik district of Maharashtra State. It drains into the Arabian Sea near Mumbai. Left bank tributary-Tanya, Right bank tributaries- Pinjal, Dehraja, and Surya. It supplies much of Mumbai's drinking water. It is the largest river in the Northern Konkan region and drains Maharashtra's whole Palghar district. It is one of the west flowing rivers in the region North of Mumbai and South of the Tapi river. It is one of the most polluted rivers in India.

**Source:** Forum IAS

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

• Rubber plant requires high temperature throughout the year – ranging between 20°-35°C or average monthly mean of 27°C. It requires heavy rainfall. The annual average rainfall of not less than 200 cm is optimum. Rubber tree thrives well when the distribution of rainfall is uniformly high all over the year. Deep, friable, well-drained soils are ideal for rubber cultivation They promote root development, and acidic soils are also suitable. Thailand is the leading Rubber producing country in the world. Thailand is followed by Indonesia and China at the second and third place respectively. India stands at fourth position in Rubber production. Traditional rubber-growing states comprising Kerala and Tamil Nadu account for 81% of production.

Source: Forum IAS

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

• Ponmudi hills are also known as 'Golden Hill' or 'Golden Peak'. It is located in the state of Kerala. It is part of the Western Ghats Mountain range. The hills are a part of the Agasthyamalai landscape, at the southernmost tip of the Western Ghats. These hills are rich in biodiversity. Recently, the third species of damselfly has been discovered from this region. It is named Cliffside Bambootail (Phylloneura rupestris). It lays eggs in the moss beds over rock cliffs. It is endemic to the Western Ghats. It has been recorded only in the area between the Nilgiri Hills and Sharavathi Valley, north of the Palghat Gap.

**Source: Forum IAS** 

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

Rip currents are strong currents that flow from the shore back to the open sea or lake. They form due
to beach shapes and can happen in rocky or sandy beach areas. They may form in spaces between
sandbars, piers, or sections of a reef. Rip currents are one of the most significant hazards for
beachgoers and swimmers, as they can swiftly carry people out to sea. Rip currents do not pull
swimmers underwater; rather, they pull swimmers away from the shore.

**Source: Forum IAS** 

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

- Statement 1 is incorrect. Papua New Guinea is an island country situated in the south-western Pacific. It is the world's third-largest island nation.
- Statements 2 and 3 are correct. Papua New Guinea gained self-government on December 1, 1973, and became independent on September 16, 1975. It is a constitutional monarchy and part of the Commonwealth. The British monarch, represented by a governor-general, serves as the head of state, while the Prime Minister leads the government. It is a full-time member of the Commonwealth of



Nations, the Pacific Community, and the Pacific Islands Forum. Neighboring countries are: Indonesia to the west, Australia to the south, and the Solomon Islands to the south-east. It shares its land border only with Indonesia.

**Source:** Forum IAS

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

- Statements 1 and 3 are correct. Pigeon pea prefers well-draining, loamy to sandy soils with a pH between 5.0 and 7.0 for optimal growth. This soil type allows for proper root development and helps prevent waterlogging, which can be detrimental to the plants. In India, around 80-90% of pigeon pea is intercropped, often with other crops like cereals, oilseeds, and other pulses. Intercropping helps improve soil fertility, reduces pest and disease incidence, and enhances overall productivity and income for farmers.
- Statement 2 is incorrect. Pigeon pea thrives in warm, semi-arid, and sub-humid climates. It prefers temperatures between 20°C and 30°C and does not grow well in cool or temperate climates. Pigeon pea serves as a significant legume crop and a protein-rich food, mainly consumed as dal in India. In India, it is alternatively known as arhar and tur. It needs an annual rainfall of 600-650mm, along with moisture during the initial eight weeks and dry conditions during its flowering and pod development phase. It can be grown between 26°C to 30°C during the rainy season and 17°C to 22°C in the postrainy season (November to March). It is highly sensitive to low radiation during pod development, so flowering in the monsoon or cloudy weather results in weak pod formation.

**Source:** Forum IAS

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

• Kiru Hydel Project is being developed over the Chenab River in Kishtwar district, Jammu and Kashmir (J&K). It is a 624MW run-of-river project. Run-of-river project are hydroelectric systems that harvest the energy from flowing water to generate electricity in the absence of a large dam and reservoir. J&K, Himachal Pradesh, Punjab, Haryana, Uttar Pradesh, Uttaranchal, Rajasthan, Union territories of Chandigarh & Delhi are the beneficiary states.

**Source:** Forum IAS

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

- Statement 1 is correct. Sweden is the largest country by area in Northern Europe and the European Union, with 450,295 square kilometers.
- Statements 2 and 3 are incorrect. Not all Nordic-Baltic countries are members of the European Union. For example, Norway and Iceland are part of the Nordic-Baltic region but are not EU members. Poland is not considered one of the Nordic-Baltic countries. It includes the governments of 8 countries of the north: Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden.

**Source:** Forum IAS

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

- Statement 1 is incorrect. The Badwater Basin is located in Death Valley National Park, which is situated in California and Nevada, United States.
- Statements 2 and 3 are correct. The Badwater Basin is known for being the lowest point in North America, with an elevation of 282 feet (86 meters) below sea level. Death Valley, where the Badwater Basin is located, experiences extreme heat during the summer months, with temperatures often exceeding 120°F (48.9°C). In contrast, winter temperatures in Death Valley can be relatively cool.

**Source: Forum IAS** 





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

• Denmark, along with Sweden, Norway, Finland, and Iceland, is part of the Nordic region. Estonia, Latvia, and Lithuania are referred to as Baltic states. Except Iceland and Norway, all Nordic-Baltic countries, also known as Nordic-Baltic Eight (NB8) are the members of the European Union.

**Source: Forum IAS** 

#### **Polity**

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

• Statement 1 and 2 are correct. As per the SC, Laws and regulations founded on gender bias are unconstitutional. Article 142 grants the Supreme Court discretionary authority. Article 142 empowers the Supreme Court to issue decrees or orders deemed necessary to achieve complete justice in any pending cause or matter within its jurisdiction.

Source: Forum IAS

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

• Pandaram lands refer to a form of land ownership. The term "Pandaram" is derived from the Malayalam words "panda" (property) and "aram" (rent). Over 60% of the land in Lakshadweep, falls under the Pandaram lands. This land covers parts of Androth, Kalpeni, Kavaratti, Minicoy, and Agatti islands, as well as six uninhabited islands.

**Source: Forum IAS** 

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

- Statement 1 is correct. The right to information is the right which ensures that the public become 'citizens' rather than becoming 'subjects' in a democratic state, by having unhindered access to the flow of information regarding the functioning of the different arms of the government-legislature, executive and judiciary.
- Statement 2 is incorrect. The Right to information has not been mentioned explicitly as a fundamental right in the constitution. SC has held Right to Information (RTI) to be a derivative of Article 19 (1) (a) which grants the freedom of speech and expression. RTI is also linked to the Indian constitution's Right to Life and Personal Liberty (Article 21).

**Source: Forum IAS** 

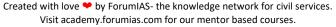
#### 21. Correct Answer is (A)

• The Sixth Schedule of Indian Constitution contains provisions related to the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram. The primary objective of this schedule is to provide a degree of autonomy and self-governance to tribal communities while safeguarding their customary laws, practices, and traditions. The Sixth Schedule establishes Autonomous District Councils (ADCs) for these tribal areas, which have powers to make laws, manage land, and regulate traditional practices. These ADCs have the authority to legislate on various subjects, including land rights, forest management, and customary laws, which helps protect and preserve the unique cultural and social identity of tribal communities.

**Source: Forum IAS** 

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

• Statements 1 and 3 are correct. The Gram Sabha is the smallest and the only permanent unit in the Panchayati Raj system. It is a village assembly consisting of all adult residents of a village or a group of





villages. The Gram Sabha serves as the foundation of the Panchayati Raj system and plays a crucial role in decision-making, planning, and implementation of various development programs at the village level. Tax collection by panchayats decreased from ₹3,12,075 lakh in 2018-19 to ₹2,71,386 lakh in 2021-2022.

• Statement 2 is incorrect. Block Panchayats do not hold elections for the Panchayat Samiti council seats. Rather, the block council consists of all of the Sarpanchas and the Upa Sarpanchas from each Gram Panchayat along with members of the legislative assembly (MLA), members of parliament (MPs), associate members (like a representative from a cooperative society) and members from the Zilla Parishad who are a part of the block. The Gram Panchayat members nominate their Sarpanch and Upa Sarpanch amongst their ranks, which extend to the selection of the chairperson and vice-chairperson as well. The Executive Officer (EO) is the head of the administration section of the Panchayat Samiti.

**Source:** Forum IAS

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

- Statement 1 is incorrect. Political parties registered under Section 29A of the Representation of the People Act, 1951 are not required to pay taxes on their income, including income derived from house property, and capital gains. Under Section 13A of the Income Tax Act, 1961, political parties are given 100% tax exemption.
- Statement 2 is correct. Although political parties are exempted from paying taxes, they are still required to file their income tax returns. It is the responsibility of the Chief Executive Officer of the political party to file the return of income and also to sign and verify the same.

**Source: Forum IAS** 

#### **Acts & Policies**

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

• Recently, the government inaugurated the first Skill India Centre (SIC) of the country in Sambalpur, Odisha. **Objectives:** It aims to empower youth with industry-relevant skills and democratize access to quality education and establish a level-playing field for the aspiring youth. The centre will offer courses in sectors which are high in demand. It will revolutionize the skilling landscape in India by offering enhanced accessibility, personalized learning experiences, and improved career guidance to learners. It will enable learners to acquire relevant skills and stay updated with industry trends. It will harness the potential of demographic dividends to promote rural development, nurture local entrepreneurship and advance socio-economic growth.

**Source:** Forum IAS

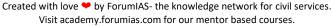
#### 25. Correct Answer is (A)

- Statement 1 is correct. The National Livestock Mission (NLM) aims to improve the availability of livestock products (like meat, milk, eggs) as well as increase the quality of livestock through breed development, better feed and fodder availability, and enhanced animal health services.
- Statement 2 is incorrect. The National Livestock Mission (NLM) is implemented by the Department of Animal Husbandry and Dairying (DAHD), Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.

**Source: Forum IAS** 

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

• The FMBAP is a scheme implemented by the Government of India to provide reasonable protection against floods and erosion in critical flood-prone areas, including border regions. The Scheme has two





components: - 1) Flood Management Programme (**FMP**)— This includes work related to flood control, anti-erosion, drainage development and anti-sea erosion. 2) River Management and Border Areas (**RMBA**) component-This includes flood control and anti-erosion works on common border rivers with neighbouring countries, including hydrological observations and flood forecasting. The Scheme "FMBAP" has been framed by merging the components of two continuing XII Plan schemes titled "Flood Management Programme (FMP)" and "River Management Activities and Works related to Border Areas (RMBA)".

**Source:** Forum IAS

#### 27. Correct Answer is (D)

• The Pradhan Mantri Uchchatar Shiksha Abhiyan (PM-USHA) scheme is launched to enhance access, equity, and excellence in higher education. This scheme aims at investing in infrastructural and academic development of higher education institutions to enhance access, equity, and excellence in higher education. It is a Centrally Sponsored Scheme, launched by the Ministry of Education. It is in consonance with the objective of National Education Policy.

**Source:** Forum IAS

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

- Statement 1 is incorrect. The Agnipath Scheme is aimed at recruiting young individuals as soldiers, airmen, and sailors (personnel below the officer rank) in the Indian Armed Forces, not for direct entry into the officer cadre.
- Statement 2 is correct. Under the Agnipath Scheme, recruits, known as Agniveers, are hired for a four-year period. After completing the four-year tenure, 25% of the Agniveers will be selected to continue their service in the Armed Forces, while the remaining 75% will be discharged with a financial package and potential opportunities for employment in other sectors.

**Source:** Forum IAS

#### 29. Correct Answer is (D)

• Statements 1, 2 and 3 are incorrect. Rashtriya Udyamita Vikas Pariyojana aims to provide individuals with comprehensive entrepreneurship training, creating job providers instead of job seekers. This initiative emphasizes the reskilling and upskilling of employees to boost their competitiveness and adaptability in an age of disruptive technology. It will provide extensive entrepreneurship training for 22 weeks, integrating theoretical understanding with practical experience through hands-on learning. The Government of India has collaborated with Flipkart to provide training to street vendors and small shopkeepers.

**Source: Forum IAS** 

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

• The Islands on the Air (IOTA) expedition program is an initiative aimed at promoting contacts between amateur radio operators (ham radio) and stations located on islands around the world. Amateur radio is a popular hobby involving the use of radio frequency spectrum for non-commercial purposes. HAM radio operators communicate using designated radio frequencies, engaging in diverse activities like contests, emergency communication support, experimentation, technical learning, and community engagement.

**Source:** Forum IAS

#### **International Relations/Organizations**



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

- Statement 1 is incorrect. The GIDH does not aim to replace traditional healthcare systems with purely digital solutions. Instead, it seeks to complement and enhance existing health systems by integrating digital technologies where appropriate and promoting a people-centered, ethical, and equitable approach to digital health.
- Statements 2 and 3 are correct. GIDH is being led by the World Health Organization (WHO) in collaboration with its partners. The GIDH aims to support countries in leveraging digital technologies to improve health outcomes, strengthen health systems, and achieve universal health coverage. Digital Health encompasses a wide range of technologies and platforms, such as telemedicine, mobile health applications, electronic health records, and artificial intelligence, all aimed at improving access to healthcare, enhancing the quality of care, and promoting health equity.

**Source: Forum IAS** 

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

- Statement 1 is incorrect. UNESCAP's primary objectives do not include negotiating trade agreements between Asia-Pacific countries. Instead, it focuses on promoting economic and social development, regional cooperation, and integration in the Asia-Pacific region. It provides technical assistance and capacity-building services to support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development. It's headquartered is at Bangkok, Thailand.
- Statements 2 and 3 are correct. The Asia-Pacific SDG Progress Report is published by UNESCAP. This report provides an overview of the progress made by countries in the region towards achieving the Sustainable Development Goals (SDGs) and highlights key challenges and opportunities for further advancement. UNESCAP is one of the five regional commissions of the United Nations, focusing specifically on the Asia-Pacific region. The other four regional commissions are the Economic Commission for Africa (ECA), the Economic Commission for Europe (ECE), the Economic Commission for Latin America and the Caribbean (ECLAC), and the Economic and Social Commission for Western Asia (ESCWA).

**Source:** Forum IAS

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

- Statements 1 and 2 are correct. The Raisina Dialogue is India's flagship conference on geopolitics and geo-economics, focusing on addressing the most pressing global issues. It is designed on the lines of the Shangri-La Dialogue.\_ It was inaugurated in 2016. 2024 is the 9th Edition.\_Theme for 2024- Chaturanga: Conflict, Contest, Cooperate, Create.
- Statements 3 and 4 are incorrect. The Raisina Dialogue is organized by the Observer Research Foundation (ORF) in collaboration with the Ministry of External Affairs, Government of India. The Raisina Dialogue typically invites participants from various countries and regions, not just South Asian countries.

**Source: Forum IAS** 

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

• Statements 1 and 2 are correct. India and Greece share a common approach on many initiatives, including UN reforms and the Cyprus issue. Greece has ratified the Framework Agreement on the International Solar Alliance (ISA). The ISA is an India-led initiative that aims to promote the use of solar energy and reduce dependence on fossil fuels.





• Statement 3 is incorrect. India is a member of the Shanghai Cooperation Organisation (SCO), while Greece is not.

**Source: Forum IAS** 

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

- Statements 1, 3 and 4 are correct. Energy Charter Treaty (ECT) is an international agreement that establishes a multilateral framework for cross-border cooperation in the energy sector. The ECT safeguards foreign investments in the energy sector by offering protection against non-commercial risks such as expropriation, transfer restrictions, and unfair treatment. It facilitates the transfer of energy-related technologies among member states by promoting cooperation in energy efficiency, research, and development.
- Statement 2 is incorrect. The ECT does not focus on establishing a common energy pricing structure globally. Instead, it aims to facilitate trade and investment in the energy sector by providing a stable and transparent legal framework.

**Source: Forum IAS** 

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

- Statements 1 and 2 are correct. G-33 countries is a coalition of developing nations known as the "Friends of Special Products". The G-33 was formed in 2003 during the WTO negotiations known as the Doha Development Agenda (DDA). It originated as a response to the concerns of developing countries regarding the unequal playing field in agricultural trade negotiations. Despite the name, there are currently 47 member nations. Some of the main countries include India, China, Indonesia, Pakistan, Nigeria, Philippines, Turkey, Tanzania, Kenya, and South Korea. A core focus of the G-33 is ensuring special and differential treatment (S&DT) provisions within the WTO agreements to support developing countries' economic needs. The "Special Products" (SP) mechanism is advocated by the G-33. It allows developing countries to designate strategically important agricultural items for less stringent tariff reductions and protection. Special products are those agricultural items that are crucial for food security, rural livelihoods, and rural development in developing countries.
- Statement 3 is incorrect. The G-33 prioritizes safeguarding the interests of developing countries in agriculture over promoting free trade and market liberalization. While the WTO advocates for free trade principles, the G-33 emphasizes addressing specific concerns of developing countries in agriculture, which may require temporary safeguards or exemptions from complete market liberalization.

**Source: Forum IAS** 

#### **Economy**

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

Statements 1 and 3 are correct. The Rubber Board functions under the administrative control of the Ministry of Commerce and Industry. It is responsible for the overall development of the rubber industry in India by assisting and encouraging research, development, extension, and training activities related to rubber. It issues licenses to various stakeholders in the rubber industry, including rubber producers, manufacturers, and exporters/traders. This is done to ensure that the industry adheres to the regulations and standards set by the government and to facilitate the smooth functioning of the sector. It maintains statistical data of rubber. The Board also takes steps to promote marketing of rubber and undertake labor welfare activities. It is responsible for the development of the rubber industry in the country by assisting and encouraging research, development, extension



and training activities related to rubber. The Board is headed by a chairman appointed by the Central Government.

• Statement 2 is incorrect. The Rubber Board is not responsible for setting and enforcing minimum wages for rubber plantation workers.

**Source:** Forum IAS

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

- Statements 1 and 3 are correct. The Fifteenth Finance Commission, led by N. K. Singh, made several recommendations for the period from 2021 to 2026. It recommended maintaining the vertical devolution of divisible tax revenues at 41%. This implies that 41% of the central government's net tax revenues would be shared with the state governments. The Fifteenth Finance Commission recommended that the central government bring down the fiscal deficit to 4% of GDP by 2025-26. This recommendation aimed to promote fiscal consolidation and macroeconomic stability at the central level.
- Statement 2 is incorrect. It recommended that a comprehensive framework for public financial management should be developed. An independent Fiscal Council should be established with powers to assess records from the centre as well as states. The Council will only have an advisory role.

**Source:** Forum IAS

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

• Statements 1 and 2 are correct. Foreign Direct Investment (FDI) is considered a significant source of non-debt financial resources for economic development. FDI contributes to the inflow of capital, technology, and expertise, which can help boost the host country's economy, create jobs, and improve infrastructure. Under the Automatic route, the Indian government permits FDI of up to 100% for the manufacturing of components, systems, or subsystems for satellites, ground segments, and user segments. This is part of India's efforts to liberalize its FDI policy and attract foreign investments in various sectors, including space technology and satellite manufacturing.

**Source:** Forum IAS

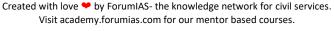
#### 40. Correct Answer is (B)

• An increase in the Average Monthly Per Capita Consumption Expenditure (MPCE) generally suggests that households have more disposable income to spend on goods and services. This could be indicative of improving economic conditions, increased income levels, and a potential reduction in poverty. Additionally, a rise in MPCE in both rural and urban areas might suggest a narrowing of the income gap between these regions.

**Source: Forum IAS** 

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

- Statement 1 is incorrect. PACS are not government-controlled banks. They are member-owned, cooperative societies that operate at the village or Gram Panchayat level. They are part of the Short-Term Cooperative Credit Structure and function under the supervision of respective state governments and the National Bank for Agriculture and Rural Development (NABARD).
- Statements 2 and 3 are correct. PACS provide short-term and medium-term agricultural loans to farmers to meet their cultivation expenses, working capital needs, and other agricultural requirements. One of the advantages of PACS is their ability to extend agricultural credit with minimal paperwork and within a relatively short time. Their grassroots presence allows them to have a better





understanding of the local needs and to process loan applications more quickly compared to traditional banks.

**Source: Forum IAS** 

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

- Statement-I is correct: India imports all of its required potash for fertilizers due to a lack of commercially viable domestic reserves.
- Statement-II is incorrect: India has sufficient reserves of nitrogen and phosphorus. It's the potash that's the limiting factor in terms of domestic fertilizer production.
- More information India is the second-highest consumer of fertilisers after China. Potash derived from molasses (PDM) is a potassium rich fertilizer that is produced as a by-product of the sugar-based ethanol industry. It is derived from the ash generated during the distillation process in molasses-based distilleries. The government has allowed sugar mills to sell potash from molasses (PDM) to fertilizer companies. This assists mills in earning additional revenue and qualifying for nutrient-based subsidies.

**Source: Forum IAS** 

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

- Statements 1, 3 and 4 are correct. Sudarshan Setu bridge is the country's longest cable-stayed bridge. It has a unique design, featuring a footpath adorned with verses from Srimad Bhagavad Gita and images of Lord Krishna on both sides. The bridge is energy efficient as solar panels installed on the bridge will provide electricity for the illumination of the bridge at night. It is on the Arabian Sea. The bridge was earlier known as 'Signature Bridge'. It has now been renamed as 'Sudarshan Setu' or Sudarshan Bridge.
- Statement 2 is incorrect. It connects Beyt Dwarka island to mainland Okha in Gujarat's Devbhumi Dwarka district.

**Source: Forum IAS** 

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

A decrease in the unemployment rate is generally associated with higher consumer spending. As more
people find employment, their disposable income rises, allowing them to spend more on goods and
services. Lower unemployment rates generally signify a healthier economy, which can increase
consumer confidence.

**Source: The Tribune** 

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

- Statements 1 and 3 are correct. The British constructed the first railway line in the former princely state of Jammu and Kashmir in 1897. It stretched over a distance of 40-45 km between Jammu and Sialkot in the plains. The Banihal-Sangaldan railway line includes the country's longest tunnel, the 12.77-km-long T-50 tunnel.
- Statement 2 is incorrect. The Banihal-Sangaldan railway line is part of the Udhampur-Srinagar-Baramulla Rail Link (USBRL) project. Over 90% of this 48 km line runs through tunnels in the hilly Ramban district.

**Source: Forum IAS** 

#### Environment

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



- Statements 1, 2 and 4 are correct. Bull sharks are found worldwide in warm, shallow waters along coasts and in rivers. They prefer water temperatures above 20°C and can be found in both marine and freshwater environments. Bull sharks are euryhaline and can thrive in both salt and fresh water. They are categorized as Vulnerable on the IUCN List of Threatened Species.
- Statement 3 is incorrect. While bull sharks can inhabit freshwater environments, they are not specifically known as freshwater sharks. They are commonly referred to as bull sharks due to their aggressive nature and stocky shape.

**Source: Forum IAS** 

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

- Statements 1 and 3 are correct. Green Anacondas inhabit tropical rainforests, swamps, and grasslands, preferring shallow, slow-moving waters such as streams, rivers, and flooded grasslands. The Green Anaconda belongs to a group of snakes known as constrictors, which are not venomous. Constrictors kill their prey by wrapping their bodies around them and squeezing tightly until the prey suffocates. They then swallow their prey whole, using their unhinged jaws.
- Statements 2 and 4 are incorrect. Green Anacondas are currently listed as a species of "Least Concern" by the IUCN. Green Anacondas are well-adapted to their aquatic environment. They have adaptations such as nostrils located on top of their snouts, allowing them to breathe while remaining submerged, and their powerful, muscular bodies enable them to move efficiently through water and constrict their prey.

**Source: Forum IAS** 

#### 48. Correct Answer is (D)

• Statements 1, 2 and 3 are correct. Cantor's Giant Softshell Turtles is also known as the Asian giant softshell turtle and the frog-faced softshell turtle. They inhabit inland, slow-moving, freshwater rivers, lakes, streams, and estuaries. It is found in eastern and southern India, Bangladesh, Burma, Thailand, Malaysia, Laos, Cambodia, Vietnam, eastern and southern China. It is a species known for its rarity and secretive nature. It spends most of its life buried and motionless, with only their eyes and mouth protruding from the sand. These turtles are primarily carnivores (piscivores) feeding on fish, crustaceans, and mollusks. They are heavily harvested by locals for meat. Conservation status-IUCN: Critically endangered, CITES: Appendix II, Wildlife Protection Act, 1972: Schedule I

**Source: Forum IAS** 

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

- The SNCRGF specifically targets mid-sized climate-resilient infrastructure and nature-based solutions within developing countries. This aligns well with a renewable energy project in a rural area, promoting cleaner energy solutions and potentially addressing climate adaptation needs. A renewable energy project in a rural area aligns with the fund's objectives, as it can contribute to climate resilience, promote sustainable development, and provide benefits to local communities. The other options (a, c, and d) are either national-level initiatives or may not necessarily contribute to climate resilience and sustainable development.
- Recently, Goa became the 1st state to get the World Bank backed Sub National Climate Resilient Green Fund.

**Source: Forum IAS** 

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





- Statements 1, 2 and 4 are correct. Spotted deer, also known as chital or cheetal, are a large species of deer with a graceful and attractive appearance. They have a distinctive reddish-brown coat covered with white spots, which gives them their name. They are generally most active during dawn and dusk, which is typical of many deer species. These times of day are known as "crepuscular" periods, when many animals are active. They prefer moderate to dense forests, as well as grasslands, and are often found near water sources. They typically inhabit areas with a mix of vegetation types, including open grassy areas for grazing and dense forest for shelter and cover from predators. \_IUCN status: Endangered. It is native to the Indian subcontinent (India, Nepal, Sri Lanka, Bhutan, and Bangladesh)
- Statement 3 is incorrect. Spotted deer are social animals, living in herds. These herds can vary in size, but they are not solitary creatures.

**Source: Forum IAS** 

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

• The Bengal tiger (Panthera tigris tigris) is classified as Endangered on the IUCN Red List. Kali Tiger Reserve, earlier known as Dandeli-Anshi Tiger Reserve, is located in the central portion of the Uttara Kannada (North Canara) district of Karnataka state. The Tiger Reserve comprises two important protected areas of the region viz., Dandeli Wildlife Sanctuary (475.018 km²) and Anshi National Park (339.866 km²). Forests of the Tiger Reserve are primarily moist deciduous and semi-evergreen, with excellent patches of evergreen forests in the westernmost parts as well as in deep valleys. The Kali River flows through the tiger reserve and is the lifeline of the ecosystem. Kali Tiger Reserve is home to rare black panthers.

**Source: Forum IAS** 

#### **Science & Technology**

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

Quasars are extremely luminous, distant objects that are powered by supermassive black holes at the
centers of galaxies. These celestial objects emit enormous amounts of energy across the
electromagnetic spectrum, making them among the brightest and most energetic phenomena in the
universe. Quasars are believed to be fueled by the accretion of matter onto the central supermassive
black hole, which releases gravitational energy as light and other forms of radiation. Due to their
immense distances from Earth, quasars appear as point-like sources of light in the night sky.

**Source: Forum IAS** 

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

• Statements 1 and 2 are correct. Rhodamine-B is a chemical commonly used for dyeing in various industries including textiles, paper, leather, and paints. It serves as a colouring agent, producing red and pink hues. When in powdered form, it appears green. However, when water is added, it changes into pink colour. As per the Food Safety Standards Act, 2006, preparation, packaging, importing, selling and serving food items with Rhodamine-B in wedding ceremonies and other public events is a punishable offence. The Tamil Nadu government has recently banned the sale and production of cotton candy after it was found that a toxic chemical Rhodamine-B was being used to make it.

**Source:** Forum IAS

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

• Statement 1 is incorrect. BCI does not use telepathy. Instead, it works by detecting and interpreting electrical signals produced by the brain, such as those associated with specific thoughts or motor actions. These signals are then translated into commands that can control external devices. Brain-



- computer interfaces (BCI) are devices that create a direct communication pathway between a brain's electrical activity and an external output like a computer or a robotic limb.
- Statement 2 is correct. BCIs have the potential to significantly improve the quality of life for individuals suffering from neurological disorders, such as spinal cord injuries, stroke, or neurodegenerative diseases like amyotrophic lateral sclerosis (ALS) or Parkinson's disease. Bypassing damaged neural pathways, BCIs can help restore communication, mobility, or other functions affected by these conditions.

**Source: Forum IAS** 

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

- Statements 1 and 3 are correct. Seasonal influenza (flu) is an acute respiratory infection caused by influenza viruses, which primarily affect the nose, throat, and lungs. Common symptoms include fever, cough, sore throat, runny or stuffy nose, muscle aches, headaches, and fatigue. Influenza viruses are single-stranded RNA viruses.
- Statement 2 is incorrect. The most common mode of transmission of the influenza virus is through airborne respiratory droplets produced when an infected person coughs, sneezes, or talks.

**Source: Forum IAS** 

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

- Statement 1 is incorrect. Cervical cancer is primarily caused by the Human Papillomavirus (HPV), not the Human Immunodeficiency Virus (HIV). While HIV weakens the immune system, making individuals more susceptible to HPV infection and progression to cervical cancer, it's not the direct cause.
- Statement 2 is correct. In India, cervical cancer is the second most frequent cancer among women between the ages of 15 and 44. According to the World Health Organization (WHO), India accounts for approximately one-fifth of the global burden of cervical cancer.

**Source: Forum IAS** 

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

- Statements 1, 3 and 4 are correct. Russia, formerly the Soviet Union, was the first country to develop the first operational cryogenic engine for space applications. Cryogenic engines use extremely low temperatures for propulsion. They rely on cryogenic fuels, such as liquid hydrogen and liquid oxygen, which are stored at very low temperatures to maintain their liquid state. These fuels are more efficient and provide higher specific impulse (thrust per unit of propellant) compared to traditional rocket fuels. The combination of liquid hydrogen and liquid oxygen as propellants in cryogenic engines provides a high specific impulse (efficiency), leading to greater thrust for the amount of propellant used.
- Statement 2 is incorrect. Cryogenic engines are efficient for launching payloads into various orbits, including low Earth orbit, geosynchronous transfer orbit, and interplanetary missions. However, they are not specifically designed for launching payloads into interstellar space, as interstellar travel currently remains a theoretical concept due to the vast distances involved.

**Source: Forum IAS** 

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

• Statement 1 is correct. The CE20 cryogenic engine is an advanced propulsion system developed by the Indian Space Research Organisation (ISRO). It is a powerful upper-stage engine that uses liquid





hydrogen and liquid oxygen as propellants and operates at extremely low temperatures. The CE20 engine has significantly enhanced India's capability to launch heavier payloads into space.

• Statement 2 is incorrect. The term "human rating" of a spacecraft refers to the certification process that ensures the spacecraft is safe and reliable for transporting humans. This involves evaluating various factors such as life support systems, crew safety features, environmental control systems, and structural integrity, among others.

**Source: Forum IAS** 

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

• Solar Maximum refers to the period in the solar cycle when the Sun's activity is at its highest level, characterized by an increased number of sunspots, solar flares, and coronal mass ejections (CMEs). The solar cycle is a nearly periodic 11-year fluctuation in solar activity. During solar maximum, the Sun exhibits increased levels of sunspots, solar flares, and coronal mass ejections due to the intensification of its magnetic field. This heightened activity impacts space weather and can affect satellite communications, power grids, and other technology on Earth.

**Source:** Forum IAS

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

Ultra-processed foods are typically characterized by a high degree of industrial processing, which often involves multiple stages and the addition of various ingredients, such as preservatives, stabilizers, emulsifiers, and other additives. These foods are usually ready-to-eat or ready-to-heat, and they may contain high levels of added sugar, salt, and unhealthy fats. They usually have five or more ingredients, including additives that are not used in home cooking. These other ingredients are usually flavour and taste enhancers, emulsifiers and colours, and all of them are meant to improve shelf life and taste or make the food convenient to eat. Examples of ultra-processed foods include packaged snacks, soft drinks, instant soups, and frozen meals.

**Source: Forum IAS** 

#### 61. Correct Answer is (D)

• Grey Zone Warfare is characterized by ambiguous actions and operations that are designed to gradually change the status quo in a region or international relations without triggering a full-scale military response from the targeted nation. These actions often involve non-military tools, such as economic pressure, propaganda campaigns, and the use of non-state actors to achieve political objectives. It involves tactics like cyberattacks, misinformation, and economic pressure to weaken an opponent. China has been skillfully using this strategy, especially against India and neighboring countries.

**Source: Forum IAS** 

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

• Guinea worm disease is caused by the parasitic worm Dracunculus medinensis. It is an infectious 'Neglected tropical disease' (NTD). It is basically a human disease. However, it can also spread to animals and humans by eating certain aquatic animals that might carry Guinea worm larvae, like fish or frogs. It is transmitted through drinking water containing Guinea worm larvae. It affects poor communities in remote parts of Africa that do not have safe water to drink. It can be prevented by filtering drinking water through a piece of fine-mesh cloth, chlorination, or boiling. There is no drug & vaccine to prevent Guinea worm infection. India eliminated GWD in the 1990s and it received GWD-free certification from the WHO in 2000.



**Source: Forum IAS** 

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

- Statement 1 is incorrect. Surrogacy refers to an arrangement where a woman (the surrogate mother) carries and gives birth to a child for another person or couple (the intended parents) who will become the child's legal parents after birth. In surrogacy, the surrogate mother may or may not be biologically related to the child, depending on the type of surrogacy arrangement.
- Statement 2 is correct. Gametes are reproductive cells that unite during sexual reproduction to create a new individual. In humans and many other organisms, there are two types of gametes: sperm (produced by males) and eggs (produced by females). These gametes carry genetic information from each parent, which is combined when the gametes fuse during fertilization. This fusion creates a zygote, a single cell that divides and develops into an embryo and eventually a new individual with a unique genetic makeup.

**Source: Forum IAS** 

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

• Statements 1 and 2 are correct. A submarine cable system is designed to carry communications by means of guided electromagnetic energy. These cables, which are laid on the ocean floor, play a critical role in global communications, enabling the transmission of data, voice, and video across continents. India's legislation does not comprehensively define submarine cable systems. While there are laws and regulations in place that govern telecommunications and cable landing stations, there is no specific legal framework that explicitly defines and regulates submarine cable systems. This has led to a lack of clarity in the legal and regulatory aspects of submarine cable infrastructure in India.

**Source:** Forum IAS

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

• Calling Name Presentation (CNAP) works similarly to Truecaller and Bharat Caller ID in that it uses a database to match phone numbers with names. When a call is received, the system checks the database for the caller's name associated with the phone number and displays it on the recipient's screen. This helps the recipient identify the caller, even if the number is not saved in their contact list. The database is populated with information from various sources, including user-submitted data, public databases, and partnerships with telecom operators.

**Source: Forum IAS** 

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

• Dual-use items are products and technology that can be used both for civilian and military applications. Global positioning satellites, nuclear technology, and chemical and biological tools have both civilian and military applications, making them dual-use items. However, household appliances are primarily designed for civilian use and do not have significant military applications whereas military radar systems are specifically designed and used for military purposes such as surveillance, target tracking, and missile defense, rather than civilian applications. Missile Technology Control Regime (MTCR), Wassenaar Agreement, Nuclear Suppliers Group (India is not a member of NSG but it is a member of MTCR and Wassenaar Agreement) are global control mechanisms in place to regulate the export and trade of dual-use items.

**Source:** Forum IAS

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



• The Garbhini-GA2 AI Model, developed by a team of researchers in India, aims to accurately determine fetal age during pregnancy. It uses machine learning algorithms to analyze ultrasound images and make accurate predictions of gestational age, which is crucial for monitoring fetal growth and development. It is the first computer model for estimating late-trimester gestational age to be developed and validated using data from the Indian population. It is part of a research program called **GARBH-Ini** which focuses on advanced research about birth outcomes in India. The GARBH-Ini program is a flagship programme of the Department of Biotechnology (DBT), Govt of India. Existing Models like Hadlock and INTERGROWTH estimate pregnancy age, but they are based on Western data. However, Indian and Western babies grow differently during pregnancy. Hence, this model is beneficial for Indian population. The new Garbhini-GA2 formula for the second and third trimesters accurately determines the fetus's age for Indian population, reducing errors by nearly three times.

**Source: Forum IAS** 

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

- Bitcoin halving is designed to control the supply of new bitcoins entering circulation by reducing the mining reward. This process effectively slows down the rate at which new bitcoins are created, ensuring that the total supply of bitcoins increases at a diminishing rate. By doing so, Bitcoin halving helps maintain the value of the cryptocurrency and prevents inflation. This event is programmed into the Bitcoin algorithm and it occurs approximately every four years. The maximum supply of Bitcoin is 21 million coins, and halvings are essential to prevent this limit from being reached too quickly. By decreasing the pace of new Bitcoin creation, Bitcoin reflects the extraction pattern of a finite resource like gold-becoming harder. Halving events slow down new Bitcoin creation thereby reducing inflation in the Bitcoin system. This differs from fiat currencies, where central banks can print money freely, risking high inflation.
- **Note:** Bitcoin transactions consume a lot of electricity and create large carbon footprints because of the intense computational activity involved, even though no physical mining occurs.

**Source:** Forum IAS

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

- Statement 1 is incorrect. Orbital Module (OM) of the Gaganyaan Mission that will be Orbiting Earth comprises of Crew Module (CM) and Service Module (SM). CM is the habitable space with Earth like environment in space for the crew. It is of double walled construction consisting of pressurized metallic Inner Structure and unpressurised External Structure with Thermal Protection System (TPS). It houses the crew interfaces, human centric products, life support system, avionics and deceleration systems. It is also designed for re-entry to ensure safety of the crew during descent till touchdown. SM will be used for providing necessary support to CM while in orbit. It is an unpressurized structure containing thermal system, propulsion system, power systems, avionics systems and deployment mechanisms.
- Statement 2 is correct. The Human Rated LVM3 (HRLVM3) is the specifically modified, human-rated version of ISRO's LVM3 rocket. It is designed and configured for the safe launch of the Gaganyaan Orbital Module into the Low Earth Orbit (LEO).

**Source:** Forum IAS



