

10 PM Current Affairs Quiz Monthly Compilation

For UPSC CSE Prelims

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Art & Culture and Ancient India

Q.1) With reference to the pre-Mauryan period, consider the following statements:

- 1. Societies during the pre-Mauryan period were involved in significant ritualistic or religious activity.
- 2. Trading, during the pre-Mauryan period, was not extensively practiced.

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

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

Q.2) Who among the following is considered as the greatest Baul music saint and composer?

- a) Rabindranath Tagore
- b) Kazi Nazrul Islam
- c) Fakir Lalon Shah
- d) Allen Ginsberg

Q.3) Ol Chiki' is a unique script specifically designed for the Santali language. Who of the following is associated with the development of the script?

- a) Birsa Munda
- b) Pandit Raghunath Murmu
- c) Panchanan Barma
- d) A.R. Campbell

Q.4) Saga Dawa Festival (Triple Blessed Festival) is a festival celebrated by:

- a) Theravada Buddhism
- b) Shvetambara
- c) Mahayana Buddhism
- d) Digambara

Q.5) Consider the following statements:

- 1. Chalcolithic Age is a part of Stone Age.
- 2. During the Neolithic Age, humans began to practice agriculture and animal husbandry.
- 3. The Stone Age period marks the evolution from nomadic hunter-gatherers to more settled communities.

How many of the statements given above are correct?

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

Q.6) With reference to the National Archives of India (NAI), which of the following statements are correct?

- 1. It is responsible for preserving and managing historical records of India.
- 2. It functions under the Ministry of Information and Broadcasting.
- 3. Official records of the British Raj can be found in NAI.
- 4. Bharat Archives portal has been launched by the National Archives of India to provide access to its digitized collections.

Select the correct answer using the codes given below:

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



Answer Key

1 – (a)	2 – (c)	3 – (b)	4 - (c)	5 – (b)	6 - (b)

Answers & Explanations

1. Correct Answer is (A)

- Statement 1 is correct. Societies during the pre-Mauryan period were involved in significant ritualistic or religious activity. The Vedic religion, which was prevalent during this period, was characterized by a complex system of rituals and sacrifices, indicating a high level of religious activity.
- Statement 2 is incorrect. Trading during the pre-Mauryan period was extensively practiced. Evidence suggests that there were well-established trade routes and economic activities prior to the Mauryan Empire. The existence of ancient Indian trade routes, including the Silk Road, facilitated significant trade interactions between India and other regions such as the Roman Empire and China.

Source: The Times of India

2. Correct Answer is (C)

• Fakir Lalon Shah, also known as Lalon Shah or Lalon Fakir, is widely regarded as the greatest Baul music saint and composer. Baul music is a unique form of spiritual folk music from Bengal, which is often associated with the wandering minstrels called Bauls. The primary philosophy expressed in Baul music is mysticism and the unity of all religions. West Bengal and Bangladesh are primarily associated with Baul music. Ektara instrument is commonly used in Baul music. Recently, Indo-Bangla Baul Music Festival is conducted to celebrate the birth anniversary of Fakir Lalon Shah and promote Baul music.

Source: AIR

3. Correct Answer is (B)

• Pandit Raghunath Murmu, also known as Guru Gomke Raghunath Murmu, was a linguist and a prominent figure in the Santali community. He developed the 'Ol Chiki' script in the early 20th century with the goal of providing the Santali language, an Austroasiatic language spoken primarily in eastern India, Nepal, and Bangladesh, with a standardized writing system. The name 'Ol Chiki' translates to 'writing' or 'script' in Santali.

Source: <u>AIR</u>

4. Correct Answer is (C)

• The Saga Dawa Festival, also known as the "Triple Blessed Festival," is one of the most significant festivals in Tibetan Buddhism, which is a branch of Mahayana Buddhism. It commemorates three important events in the life of Buddha: his birth, enlightenment, and parinirvana (death).

Source: AIR

5. Correct Answer is (B)

- Statement 1 is incorrect. The Chalcolithic Age, also known as the Copper Age, is a transitional period between the Neolithic and the Bronze Age. It is characterized by the use of both stone and copper tools, but it is not considered a part of the Stone Age itself.
- Statements 2 and 3 are correct. The Neolithic Age is marked by the development of agriculture and the domestication of animals, which led to the establishment of settled communities. The Stone



Age witnessed a gradual shift from entirely nomadic hunter-gatherer societies to more settled communities with the development of tools and technologies.

Source: Forum IAS

- 6. Correct Answer is (B)
- Statements 1 and 3 are correct. National Archives of India (NAI) is responsible for preserving and managing the historical records of India. It serves as the custodian of records of enduring value of the Government of India. The NAI holds a vast corpus of records, including those from the British Raj period. These records are invaluable sources of information for scholars and researchers.
- Statements 2 and 4 are incorrect. The National Archives of India functions as an attached office under the Ministry of Culture. The correct name of the portal launched by the National Archives of India to provide access to its digitized collections is "Abhilekh Patal."

Source: AIR

Modern Indian History

Q.1) 'The Indian War of Independence, 1857' is a book written by:

- a) Chittaranjan Das
- b) Annie Besant
- c) Veer Savarkar
- d) Sardar Vallabhbhai Patel

Answer Key

1 – (c)

Answers & Explanations

1. Correct Answer is (C)

• The Indian War of Independence, 1857 is written by Veer Savarkar. This book provides a detailed account of the 1857 uprising against British rule in India. It was first published in 1909 and was initially written in Marathi. The book was banned by the British authorities due to its revolutionary content and was influential in inspiring Indian nationalists.

Source: AIR

Geography

Q.1) Which one of the following countries borders Rwanda to the west?

- a) Kenya
- b) Uganda
- c) Democratic Republic of the Congo
- d) Tanzania



Q.2) Consider the following pairs:

- Lakes-----Location
- 1. Chilika Lake-----Odisha
- 2. Pulicat Lake-----Himachal Pradesh
- 3. Kaliveli Lake-----Kerala
- 4. Vembanad Lake-----Tamil Nadu

How many of the above pairs are correctly matched?

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

Q.3) Mount Fuji is a:

- a) Shield volcano
- b) Composite volcano
- c) Caldera
- d) Mid-ocean ridge volcano

Q.4) Swell waves, also known as groundswell, are waves that are generated by distant weather systems in oceans. In this context, which one of the following statements is correct regarding the swell waves?

- a) These waves are created by local wind force.
- b) They have long wavelengths and travel long distances.
- c) These waves break as soon as they enter shallow water.
- d) They create irregular wave patterns.

Q.5) With reference to the country Sudan, which of the following statement(s) is/are correct?

- 1. It is a landlocked country.
- 2. It is the largest African country in terms of area.
- 3. It borders the Egypt to the north.

Select the correct answer using the codes given below:

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

Q.6) Which one of the following is most commonly termed as 'white gold'?

- a) Milk
- b) Cotton
- c) Salt
- d) Silver

Q.7) Consider the following statements:

- 1. Almost 90% of forest fires are man-made.
- 2. Uttarakhand forests are mainly composed of Chir Pine trees, which are highly flammable.

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.8) Consider the following statements:

- 1. The National Disaster Management Agency (NDMA) collaborates with the India Meteorological Department (IMD) to issue heatwave warnings and coordinate disaster response.
- 2. Total temperature maps, used to depict heatwaves, depicts the departure from the average temperature for a specific location and time 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

Q.9) Which one of the following processes involves introducing certain particles into clouds to stimulate rain, often used to combat drought or enhance snowfall?

- a) Cloud seeding
- b) Atmospheric pressurization
- c) Ozone modification
- d) Rain amplification

Q.10) Consider the following statements:

- 1. Solar time is calculated by measuring the earth's rotation relative to the Sun, and is variable in nature.
- 2. Currently, moon missions operate on the Coordinated Lunar Time (LTC) of the Earth.
- 3. There is no standardized time system for operations in cislunar space.

How many of the statements given above are correct?

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

Q.11) Consider the following statements:

- 1. India lags behind Sri Lanka in Human Development Index (HDI).
- 2. India has a significant gender gap in labor force participation.

3. Household debt in India has significantly increased.

Which of the statements given above are correct?

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

Q.12) Consider the following statements:

- 1. Titanium is the biggest industrial contributor to global carbon emissions.
- 2. Titanium is not found in its pure metallic form naturally.
- 3. China is the largest producer of titanium.

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

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



Q.13) Consider the following pairs:

- Places/Region-----Country
- 1. Canoas-----Argentina
- 2. Darfur-----Sudan
- 3. Dar-es-Salaam-----Ethiopia
- 4. Odesa------Ukraine

Which of the above pairs are correctly matched?

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

Q.14) The city closest to the Rafah border crossing is

- a) Jerusalem
- b) Al Arish
- c) Tel Aviv
- d) Hebron

Q.15) Consider the following statements:

- 1. Chabahar Port is located on the Gulf of Aden.
- 2. Chabahar Port serves as a gateway to landlocked countries in Central Asia.
- 3. Mumbai Port is the closest major Indian port to Chabahar Port.
- 4. Chabahar Port enhance India's connectivity to the International North-South Transport Corridor (INSTC) by facilitating a multimodal transport route that includes sea, road, and rail links.

How many of the statements given above are correct?

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

Q.16) Which of the following countries border Slovakia?

- a) Germany, Austria, Poland, Ukraine, Hungary
- b) Czech Republic, Austria, Hungary, Ukraine, Poland
- c) Poland, Ukraine, Romania, Hungary, Austria
- d) Czech Republic, Germany, Poland, Ukraine, Hungary

Q.17) The Strait of Gibraltar connects:

- a) The Red Sea to the Mediterranean Sea
- b) The Atlantic Ocean to the Mediterranean Sea
- c) The Indian Ocean to the Pacific Ocean
- d) The Black Sea to the Aegean Sea

Q.18) Which one of the following countries does NOT share a border with Niger?

- a) Nigeria
- b) Benin
- c) Ghana
- d) Libya

Q.19) Which one of the following instruments can be used to predict and warn about flash floods?

- a) Seismographs
- b) Doppler radar
- c) Barometers
- d) Anemometers



Q.20) The Carlsberg Ridge is located in the:

- a) Atlantic Ocean
- b) Indian Ocean
- c) Pacific Ocean
- d) Arctic Ocean

Q.21) With reference to the Kumaon Himalayas, consider the following statements:

- 1. Kanha National Park is located in the Kumaon Himalayas.
- 2. Nanda Devi is the highest peak in the Kumaon Himalayas.
- 3. Kali and Teesta Rivers mark the boundaries of the Kumaon Himalayas.
- 4. Nainital is located in the Kumaon region.

Which of the statements given above are correct?

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

Q.22) Consider the following statements:

- 1. China is the world's largest agricultural exporter.
- 2. The Democratic Republic of Congo (DRC) is the country with the highest reserves of cobalt.

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.23) With reference to the Bhima River, consider the following statements:

- 1. It is also known as the Chandrabagha River.
- 2. It is a major tributary of Kaveri River.
- 3. Ujani Dam is situated on the Bhima River.

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) Consider the following statements:

- 1. High atmospheric pressure is needed for the formation of cyclones.
- 2. The calm center of a tropical cyclone is called vortex.
- 3. In India, the Western Ghats region is most vulnerable to tropical cyclones.

How many of the statements given above are correct?

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

Q.25) Consider the following statements:

- 1. Millets are a group of small-seeded grasses.
- 2. Millets require cold temperatures for germination and development.
- 3. Millets are highly adaptable to a variety of soil conditions, from extremely poor to very fertile, and can handle a degree of alkalinity.

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.26) Consider the following statements:

- 1. A jet stream is a slow-moving current of air near the Earth's surface.
- 2. A weakening of the jet stream causes a prolonged heatwave.

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.27) Which of the following neighboring countries are closest to El-Fasher, the capital of North Darfur, Sudan?

- a) Egypt and Libya
- b) Chad and Libya
- c) Ethiopia and Eritrea
- d) Kenya and Uganda

Q.28) Consider the following statements:

- 1. Sepik River is the longest river in Papua New Guinea.
- 2. Papua New Guinea is a landlocked country.
- 3. Papua New Guinea is located in Southeast Asia.

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

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

Q.29) Consider the following statements:

- 1. Air turbulence refers to chaotic and unpredictable air currents disrupted from a calmer state by various forces.
- 2. The major cause of air turbulence experienced by airplanes is due to the changes in air temperature.
- 3. The development of Cumulonimbus clouds can cause air turbulence.

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) In which one of the following mountain ranges is Mount Lhotse located?

- a) Andes Mountains
- b) Himalayas
- c) Rockies
- d) Alps

Q.31) With reference to the advancement of the Southwest Monsoon in India, which of the following statements are correct?

- 1. The differential heating and cooling of land and water influences the onset of the Southwest Monsoon in India.
- 2. The monsoon advances faster in the Arabian Sea than in the Bay of Bengal.
- 3. The Deccan Plateau in India receives the first monsoon showers from the Southwest Monsoon.
- 4. It decreases with increasing distance from the sea.

Select the correct answer using the codes given below:

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



Q.32) Westerlies are stronger in the Southern Hemisphere than those in the Northern Hemisphere because:

- a) The Southern Hemisphere has more landmass
- b) The Southern Hemisphere has less landmass
- c) The Southern Hemisphere has higher temperatures
- d) The Southern Hemisphere has lower temperatures

Q.33) Consider the following statements:

- 1. Urban Heat Island (UHI) effect is a phenomenon where rural areas are significantly warmer than urban areas.
- 2. El Niño is characterised by unusually warm ocean temperatures in parts of the Pacific Ocean while La Nina is the cooling of the water in the Pacific Ocean.
- 3. Dry heat stress occurs when the temperatures rise but the humidity remains low.

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.34) Which of the following countries border the Sea of Japan?

- a) Japan, China, Philippines, and South Korea
- b) Japan, North Korea, South Korea, and Russia
- c) Japan, Taiwan, and the Philippines
- d) Japan, China, and Russia

Q.35) Consider the following:

- 1. Heavy rainfall from thunderstorms
- 2. Melting snow and ice
- 3. Gradual riverbank overflow
- 4. Collapse of a man-made dam

How many of the above are the common cause of flash floods?

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

Answer Key

1 – (c)	2 – (a)	3 – (b)	4 – (b)	5 – (b)	6 - (b)	7 – (c)
8 - (a)	9 – (a)	10 – (b)	11 - (d)	12 – (b)	13 – (b)	14 – (b)
15 - (b)	16 - (b)	17 – (b)	18 - (c)	19 – (b)	20 – (b)	21 - (d)
22 - (b)	23 – (c)	24 – (d)	25 – (c)	26 – (b)	27 – (b)	28 – (b)
29 - (c)	30 – (b)	31 - (b)	32 – (b)	33 – (b)	34 - (b)	35 – (b)



Answers & Explanations

1. Correct Answer is (C)

• Rwanda, a landlocked country in East Africa, shares its western border with the Democratic Republic of the Congo. Other bordering countries include Uganda to the north, Tanzania to the east, and Burundi to the south. Rwanda's economy is based mostly on subsistence agriculture. Coffee and tea are the major cash crops in Rwanda to export. Recently, the U.K. government has announced a plan to send migrants with failed asylum claims to Rwanda.

Source: <u>The Hindu</u>

2. Correct Answer is (A)

- Only 1 is correctly matched
- Pulicat Lake It is the second largest brackish water lagoon in India. It is situated on the border of Andhra Pradesh and Tamil Nadu. It is known for its bird sanctuary, which attracts numerous species of migratory birds.
- Kaliveli Lake It is located in Tamil Nadu and it is one of the significant brackish water bodies in the region. It is an important lake for migratory birds.
- Vembanad Lake It is also known as Vembanad Kayal, Vembanad Kol, Punnamada Lake (in Kuttanad), and Kochi Lake (in Kochi), is a significant brackish water lagoon in Kerala, India. It is the largest lake in Kerala and the longest in India.

Source: The Hindu

3. Correct Answer is (B)

• Mount Fuji is a stratovolcano, also known as a composite volcano. Stratovolcanoes are characterized by their steep, conical shape and are formed by alternating layers of volcanic ash, lava, and rock debris. These volcanoes are often found in subduction zones, where one tectonic plate is pushed beneath another, leading to magma generation and subsequent eruptions. Mount Fuji, located on the Japanese island of Honshu, is an example of a stratovolcano.

Source: <u>The Hindu</u>

4. Correct Answer is (B)

• Swell waves are generated by distant weather systems, and they can travel across vast oceanic distances without being significantly affected by local winds or currents. They have long wavelengths and periods, which allow them to maintain their energy as they travel. Unlike wind waves, which come from local winds and are shorter, steeper, and less organized, swell waves have a longer time and wavelength, making them stronger and able to move far. They impact the erosion of the beach, the flora and fauna inhabiting the beach, and recreational activities such as surfing and boating.

Source: <u>The Hindu</u>

5. Correct Answer is (B)

- Statements 1 and 2 are incorrect. Sudan is not a landlocked country. It has a coastline along the Red Sea. Algeria is the largest African country in terms of area, followed by the Democratic Republic of Congo and then Sudan.
- Statement 3 is correct. Sudan shares its northern border with the Egypt. The border stretches from the Red Sea in the east to the tripoint with Libya in the west.

Source: <u>The Hindu</u>

6. Correct Answer is (B)

• Cotton is often referred to as "white gold" because of its economic value and the soft, white fibers it produces, which resemble the precious metal gold in terms of significance. The phrase highlights the importance of cotton as a valuable commodity and its role in generating income for farmers and contributing to the economy.



Source: <u>The Hindu</u>

7. Correct Answer is (C)

• Statements 1 and 2 are correct. Almost 90% of forest fires are man-made. The majority of these fires are initiated by human activities such as agricultural burning, careless disposal of cigarettes, and intentional arson. These practices are often traditional or due to negligence, significantly contributing to the high incidence of forest fires. The forests of Uttarakhand are largely dominated by Chir Pine trees, which are known for their high flammability. The needles and twigs of Chir Pine have a high resin content, making them extremely combustible. This characteristic makes the forests particularly vulnerable to fires, especially during dry conditions when the fallen pine needles accumulate and serve as ready fuel for fires.

Source: The Times of India

8. Correct Answer is (A)

- Statement 1 is correct. The National Disaster Management Agency (NDMA) collaborates with the India Meteorological Department (IMD) to issue heatwave warnings and coordinate disaster response in India. As the apex body responsible for disaster management, NDMA works with various government agencies to mitigate the impact of disasters, including heatwaves.
- Statement 2 is incorrect. Total temperature maps show the actual temperatures over a region, which can be misleading because they do not necessarily indicate anomalous or unusually high temperatures that characterize heatwaves. Instead, anomaly maps, which depict the departure from the average or expected temperature for a specific location and time period, are more accurate for identifying heatwaves. Anomaly maps highlight temperatures that are significantly higher than the norm, which is crucial for understanding and responding to heatwaves.

Source: <u>The Hindu</u>

9. Correct Answer is (A)

• Cloud seeding is a process that involves introducing certain particles, such as silver iodide, dry ice, or salt, into clouds to stimulate rain or snowfall. The purpose of cloud seeding is to alter the microphysical processes within the cloud, promoting the formation of precipitation. This method is often employed to combat drought, enhance snowfall, or mitigate the impacts of hail and fog.

Source: <u>The Hindu</u>

10. Correct Answer is (B)

- Statements 1 and 3 are correct. Solar time is calculated based on the Earth's rotation relative to the Sun. It is variable due to the Earth's elliptical orbit and its axial tilt, which cause the apparent speed of the Sun's movement across the sky to vary at different times of the year. There is currently no standardized time system for operations in cislunar space. Each country with a space program uses its own time zone, usually based on Universal Time or the location of mission control.
- Statement 2 is incorrect. As of now, moon missions follow the time of the country that operates the spacecraft, which typically aligns with Coordinated Universal Time (UTC) of the Earth. The International Space Station also operates on UTC, but there hasn't been a standardized time system specifically for the moon or cislunar operations. This lack of a standardized time system has prompted initiatives to establish a Coordinated Lunar Time (LTC) to facilitate coordination among international bodies and private companies operating on the lunar surface and in cislunar space.

Source: <u>The Hindu</u>

11. Correct Answer is (D)

Statements 1, 2 and 3 are correct. India lags behind Sri Lanka in the Human Development Index (HDI). According to the Human Development Report, Sri Lanka has consistently ranked higher than India in HDI rankings over the years. India has a significant gender gap in labor force participation. As per various sources, the female labor force participation rate in India is significantly lower than Created with love • by ForumIAS- the knowledge network for civil services.

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that of men, and this gap has been a persistent issue. Household debt levels reached a record high of 40% of GDP by December 2023, with unsecured personal loans growing the fastest.

Source: <u>The Hindu</u>

12. Correct Answer is (B)

- Statement 1 is incorrect. The biggest industrial contributors to global carbon emissions are typically the burning of fossil fuels for electricity, heat, and transportation. The steel industry is also a significant contributor, accounting for about 8% of global emissions. Titanium production does not rank as a major contributor in comparison.
- Statements 2 and 3 are correct. Titanium is not found in its pure form in nature. It is typically found in minerals such as ilmenite (FeTiO3) and rutile (TiO2). These minerals must be processed to extract titanium metal. China is the largest producer of titanium, particularly in the form of titanium sponge, which is a primary form of titanium produced industrially. China leads in the production and supplies a significant portion of the global demand for titanium products.

Source: <u>The Hindu</u>

13. Correct Answer is (B)

- Canoas Canoas is a city in the state of Rio Grande do Sul in Brazil. Recently, it has been affected by the worst ever floods.
- Darfur It is a region in western Sudan. The has been an ongoing civil war between the Arab and African communities. This has led to widespread violence and human rights abuses.
- Dar-es-Salaam Dar es Salaam is the largest city and financial hub of Tanzania. It has been hit by water shortages due to climate change and infrastructure issues.
- Odesa Odessa is a port city on the Black Sea in southern Ukraine. Odesa has been in the news recently due to several events related to the ongoing Russia-Ukraine war.

Source: <u>The Hindu</u>

14. Correct Answer is (B)

• The Rafah border crossing is located between Egypt and the Gaza Strip in the Palestinian territories. It is situated in the northeastern part of the Sinai Peninsula, close to the city of Al Arish in Egypt. Al Arish is the capital of the North Sinai Governorate and is located about 40 kilometers west of the Rafah border crossing.

Source: <u>The Hindu</u>

15. Correct Answer is (B)

- Statements 1 and 3 are incorrect. Chabahar Port is situated on the Gulf of Oman. Kandla Port in Gujarat, India, is closer to Chabahar than Mumbai.
- Statements 2 and 4 are correct. INSTC aims to connect India, Russia, and Europe through a combination of maritime, road, and railway networks. Chabahar serves as a key entry point for INSTC goods entering Iran. Chabahar's location on the Gulf of Oman allows access to Central Asian nations through Iran.

Source: The Hindu

16. Correct Answer is (B)

• Slovakia shares borders with the Czech Republic to the northwest, Austria to the southwest, Hungary to the south, Ukraine to the east, and Poland to the north. It is a landlocked country in Central Europe. Slovakia shares its longest border with Hungary.

Source: <u>The Hindu</u>

17. Correct Answer is (B)

• The Strait of Gibraltar is a narrow strait that separates the European continent (Iberian Peninsula) from North Africa (Maghreb region) and connects the Atlantic Ocean to the Mediterranean Sea. It



is approximately 14 kilometers wide at its narrowest point and has great strategic and economic importance, as it serves as a vital shipping route between the two bodies of water.

Source: <u>The Times of India</u>

18. Correct Answer is (C)

• Niger is a landlocked country in West Africa and shares its borders with seven countries: Nigeria, Benin, Burkina Faso, Mali, Algeria, Libya, and Chad. Ghana, while also located in West Africa, does not share a border with Niger.

Source: <u>The Hindu</u>

19. Correct Answer is (B)

• Doppler radar is a technology that can be used to predict and warn about flash floods. It works by sending out electromagnetic wave fields that can detect the movement and intensity of precipitation in the atmosphere. By analyzing the returned signals, meteorologists can determine the amount and location of rainfall, allowing them to predict potential flooding events.

Source: <u>The Hindu</u>

20. Correct Answer is (B)

• The Carlsberg Ridge is an underwater mid-ocean ridge situated in the Indian Ocean, specifically in the northwest region. It is a part of the complex tectonic structure of the region and separates the Arabian Plate from the Indian Plate. Recently, India has applied to the International Seabed Authority (ISA) for licenses to explore the Carlsberg Ridge and Afanasy-Nikitin Seamount for minerals like cobalt and manganese.

Source: The Times of India

21. Correct Answer is (D)

- Statements 1 and 3 are incorrect. Kanha National Park is located in Madhya Pradesh, not in the Kumaon Himalayas region of Uttarakhand. The Kumaon Himalayas lie between the Sutlej River in the west and the Kali River in the east.
- Statemensts 2 and 4 are correct. Nanda Devi at an elevation of 7,816 meters (25,643 feet) is the highest peak in the Kumaon Himalayas. Nainital is a famous hill station and lake city located in the Kumaon region of Uttarakhand.

Source: <u>The Hindu</u>

22. Correct Answer is (B)

- Statement 1 is incorrect. China is the world's largest agricultural importer, not exporter. The United States holds the title of the world's largest agricultural exporter.
- Statement 2 is correct. The Democratic Republic of Congo (DRC) has the world's highest reserves of cobalt and significant reserve of copper.

Source: <u>The Hindu</u>

23. Correct Answer is (C)

- Statements 1 and 3 are correct. The Bhima River is also referred to as the Chandrabagha River. The Ujani Dam, also known as the Bhima Dam, is situated on the Bhima River.
- Statement 2 is incorrect. The Bhima River is a major tributary of the Krishna River.

Source: <u>Forum IAS</u>

24. Correct Answer is (D)

• Statements 1, 2 and 3 are incorrect. Cyclones form around a low-pressure area, not a high-pressure area. The low-pressure center is a defining characteristic of cyclones. The calm center of a tropical cyclone is called the eye. The eastern coast of India, particularly the states of Odisha, Andhra



Pradesh, Tamil Nadu, and West Bengal, is more vulnerable to tropical cyclones than the Western Ghats region.

Source: AIR

25. Correct Answer is (C)

- Statements 1 and 3 are correct. Millets are a group of small-seeded grasses that are widely grown around the world as cereal crops or grains for fodder and human food. Millets are highly adaptable to a wide range of soil conditions, including poor and infertile soils, and they can tolerate some degree of soil alkalinity.
- Statement 2 is incorrect. Millets are grown in warm climates and are known for their ability to thrive in hot and dry conditions. They do not require cold temperatures for germination and development.

Source: Forum IAS

26. Correct Answer is (B)

- Statement 1 is incorrect. Jet streams are fast-moving currents of air found high in the troposphere. Jet streams may start, stop, split into two or more parts, combine into one stream, or flow in various directions including opposite to the direction of the remainder of the jet.
- Statement 2 incorrect. A weakening or stalling of the jet stream can lead to persistent weather patterns, including prolonged heatwaves. When the jet stream becomes weaker or wavier, it can cause high-pressure systems to become stuck over a region, resulting in clear skies and hot temperatures for an extended period.

Source: The Hindu

27. Correct Answer is (B)

- Chad lies directly to the west of Sudan, and North Darfur shares a border with Chad. Hence, Chad is one of the closest neighboring countries to El-Fasher.
- Libya is located to the northwest of Sudan. While it does not share a direct border with North Darfur, it is geographically closer to El-Fasher compared to other listed countries.

Source: <u>The Hindu</u>

28. Correct Answer is (B)

- Statement 1 is correct. The Sepik River is the longest river in Papua New Guinea, with a length of around 1,126 kilometers.
- Statements 2 and 3 are incorrect. Papua New Guinea is not a landlocked country. It has coastlines along the Pacific Ocean, Bismarck Sea, Coral Sea, and other water bodies. Papua New Guinea is part of the Oceania region.

Source: AIR

29. Correct Answer is (C)

- Statements 1 and 3 are correct. Turbulence is characterized by chaotic and unpredictable air currents that are disrupted from a calmer state by various forces such as wind shear, jet streams, and atmospheric pressure changes. Cumulonimbus clouds, which are associated with thunderstorms, can cause severe turbulence due to the strong updrafts and downdrafts within the cloud. These clouds are known for creating significant turbulence that can affect aircraft. The turbulence caused by these clouds are known as detectable turbulence. Whereas, undetectable or Clear air turbulence (CAT) is particularly hazardous to aircraft because it is invisible to radar and satellite.
- Statement 2 is incorrect. The main cause of turbulence is the mixing and shearing of air masses with different densities and velocities. This is often caused by variations in wind direction and speed, and can occur in various weather conditions, including thunderstorms, jet streams, and wind shear. While temperature variations can contribute to turbulence, changes in air pressure



due to altitude are a more significant cause. Climate change affects various atmospheric conditions, including increased temperature differences between different atmospheric layers, jet stream changes, and thunderstorm activity, which lead to more frequent and intense turbulence.

Source: <u>The Times of India</u>

30. Correct Answer is (B)

• Mount Lhotse is located in the Himalayas, specifically on the border between Tibet and the Khumbu region of Nepal. It is the fourth highest mountain in the world. The name "Lhotse" means "South Peak" in Tibetan, reflecting its position just south of Mount Everest, to which it is connected via the South Col.

Source: AIR

31. Correct Answer is (B)

- Statements 1 and 4 are correct. The differential heating and cooling of land and water create a lowpressure area over the Indian subcontinent, which attracts the moisture-laden winds from the ocean, leading to the onset of the Southwest Monsoon. The intensity of the monsoon generally decreases with increasing distance from the sea, as the moisture content in the air reduces as it moves inland.
- Statements 2 and 3 are incorrect. The monsoon advances faster in the Bay of Bengal than in the Arabian Sea. The Bay of Bengal branch of the monsoon is generally more active and progresses more rapidly. Kerala, located on the southwestern coast of India, receives the first monsoon showers from the Southwest Monsoon.

Source: AIR

32. Correct Answer is (B)

• The Southern Hemisphere has a larger proportion of ocean compared to land. Oceans provide a more uniform and unobstructed surface for wind flow, which allows the westerlies to maintain their strength and consistency. In contrast, the Northern Hemisphere has more landmasses, which create friction and disrupt the wind patterns, making the westerlies less strong and more variable.

Source: <u>The Hindu</u>

33. Correct Answer is (B)

- Statement 1 is incorrect. The Urban Heat Island (UHI) effect is a phenomenon where urban areas are significantly warmer than surrounding rural areas. This is due to factors such as the concentration of buildings, roads, and other infrastructure that absorb and re-emit heat more than natural landscapes.
- Statements 2 and 3 are correct. El Niño is characterized by unusually warm ocean temperatures in the eastern tropical Pacific Ocean, while La Niña is characterized by the cooling of the water in the same region. These phenomena are part of the El Niño-Southern Oscillation (ENSO) cycle and have significant impacts on global weather patterns. Dry heat stress occurs when temperatures rise but humidity remains low. This condition is characterized by intense heat and dry air, making it difficult for the body to cool down through sweating, which can lead to dehydration and other severe effects.

Source: NDTV

34. Correct Answer is (B)

• The Sea of Japan is bordered by the Japanese islands of Hokkaido, Honshu, and Kyushu to the east and south, by North Korea to the west, by South Korea to the southwest. It is bordered by the Russian mainland and the island of Sakhalin (part of Russia) to the north.

Source: <u>The Hindu</u>



- 35. Correct Answer is (B)
- **Heavy rainfall from thunderstorms**: This is a common cause of flash floods. Intense rainfall over a short period can overwhelm the drainage capacity of an area, leading to sudden flooding.
- **Melting snow and ice**: Simply, melting of snow and ice are slow processes. This contributes to regular flooding rather than flash floods. Flash floods, on the other hand, are defined by their rapid onset and typically result from very heavy rainfall over a short period.
- **Gradual riverbank overflow**: Gradual overflow does not cause flash floods.
- **Collapse of a man-made dam**: This is a common cause of flash floods. The sudden release of a large volume of water from a dam can result in rapid flooding downstream.

Source: AIR

Polity

Q.1) Consider the following statements:

- 1. Right to strike is a fundamental right of employees in India.
- 2. The Industrial Relations Code (CIR) of 2020 has introduced harsh penalties for illegal strikes.
- 3. India is not a signatory to the Labour Statistics Convention of 1985.

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.2) Consider the following pairs:

Articles-----Objectives

- 1. Article 31A-----Provides primacy to the Directive Principles of State Policy (DPSP) under Articles 39(b) and (c).
- 2. Article 31B------ Validates certain laws included in the Ninth Schedule, protecting them from judicial review.
- 3. Article 31C------ Allows the state to acquire estates for land reform and other public purposes without violating fundamental rights.

How many of the above pairs are correctly matched?

- a) Only one pair
- b) Only two pairs
- c) All three pairs
- d) None of the pairs

Q.3) In which one of the following cases did the Supreme Court rule that the Constitution needs a harmonic balance of fundamental rights and Directive Principles of State Policy (DPSP)?

- a) Golak Nath Case
- b) Kesavananda Bharati Case
- c) Minerva Mills Case
- d) Coelho case

Q.4) The current legal status of cannabis cultivation, possession, and use for recreational purposes in India is:

- a) Legal and regulated
- b) Decriminalized
- c) Illegal
- d) Permitted with a medical prescription in all states



Q.5) Consider the following statements regarding Symbol Loading Unit (SLU) in Electronic Voting Machines (EVM):

- 1. The SLU is only used to upload the symbols of candidates contesting a particular seat onto the Voter Verified Paper Audit Trail (VVPAT).
- 2. Optical Scanner is one of the components of the EVM system where SLUs are used.
- 3. As per a recent Supreme Court order, SLUs must be sealed and stored in a container, kept in a strongroom with EVMs, for at least 45 days after the declaration of election results.

How many of the statements given above are correct?

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

Q.6) With reference to the Spice Board of India, consider the following statements:

- 1. It is a regulatory and export promotion agency for Indian spices.
- 2. It sets minimum retail prices for spices sold in India.
- 3. Spice Train is an online campaign started by the Spice Board of India to educate Indians about the country's rich spice heritage.

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

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

Q.7) The 'Rule of Law' is important to make sure everyone follows the rules set by laws. Based on this context, which one of the following best describes the Rule of Law?

- a) The government has the power to modify laws without judicial review.
- b) The armed forces or ruler can implement laws without legal rationale.
- c) The idea that a country should be ruled by the law rather than by the choices made by certain political representatives.
- d) The practice of enforcing laws differently depending on a person's social rank.

Q.8) Consider the following statements:

- 1. Section 123 of the Representation of the People (RP) Act considers the issuing of freebies as a corrupt practice.
- 2. The Model Code of Conduct (MCC) prohibits parties and candidates from appealing to caste, religion, or ethnic feelings in order to get votes.

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.9) Consider the following statements:

- 1. The online gaming industry in India has experienced a significant growth in recent years.
- 2. The IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, provide regulations for the online gaming industry.

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.10) In India, the 'Sarna Code' refers to the religious and cultural practices of indigenous tribal communities that worship nature. Which one of the following constitutional provisions supports the recognition of Sarna as a separate religion?

- a) Article 15
- b) Article 25
- c) The Preamble
- d) Article 29

Q.11) Consider the following statements:

- 1. Health is officially defined by the World Health Organization as free from disease or infirmity.
- 2. India has no law covering end-of-life care.
- 3. The Supreme Court has interpreted 'Right to die with dignity' as a fundamental right under the Article 21 of the Indian Constitution.

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

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

Q.12) Consider the following statements:

- 1. In order to ensure equality of status and opportunity, the Indian Constitution calls on the government to address disparities arising from birth.
- 2. High inequality is linked to political polarization and increased societal conflict.
- 3. An inheritance tax is imposed every year with a focus on annual income from wages.

How many of the statements given above are correct?

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

Q.13) Consider the following statements:

- 1. In India, the right to vote is governed by the Representation of the People Act, 1951.
- 2. Undertrial prisoners in India are allowed to vote in elections.
- 3. In India, convicts with sentences of less than two years in prison cannot contest election.
- 4. Prisoners held under preventive detention can vote in an election.

How many of the statements given above are correct?

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

Q.14) Consider the following statements:

- 1. Parliament has unlimited power to amend the Constitution.
- 2. Article 31C of the Constitution states that laws made to give effect to Articles 39(b) and (c) could not be declared void on the grounds of violating Articles 14 or Article 19 of the Indian Constitution.
- 3. Articles 14, 19, and 21 represents a "golden triangle" of protection against unrestricted state power.
- 4. Article 37 declares that Directive Principles of State Policy (DPSP) will not be "enforceable in any court".
- 5. Article 13 of the Indian Constitution declared that any law made in breach of a fundamental right would be valid.

How many of the statements given above are correct?

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



Q.15) In the context of public service, which one of the following is the primary objective of the Karmayogi Competency Model, seen in the news recently?

- a) Increase the salary of public servants
- b) Standardize job roles across all departments
- c) Enhance the skills, competencies, and capabilities of public servants
- d) Reduce the workforce in public services

Q.16) Consider the following statements:

- 1. In Indra Sawhney Case, the Supreme Court introduced the concept of the "creamy layer" within the Other Backward Classes (OBC) category.
- 2. Articles 15 and 16 of the Indian Constitution allows reservation based on religion.
- 3. In Janhit Abhiyan Case, the Supreme Court upheld the constitutional validity of reservations based on economic criteria.

How many of the statements given above are correct?

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

Q.17) Consider the following statements:

- 1. Free and fair elections are a part of the basic structure of the Constitution.
- 2. Article 324 gives the Election Commission complete authority to ensure a free and fair election.

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) Consider the following statements:

- 1. The Election Commission of India developed the Model Code of Conduct (MCC) based on the Supreme Court decision in S. Subramaniam Balaji vs. Govt of Tamil Nadu.
- 2. The model code of conduct is legally enforceable.
- 3. Neither the Representation of the People Act nor the Conduct of Election Rules makes any provision for the model code of conduct.

How many of the statements given above are correct?

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

Q.19) Consider the following statements:

- 1. The Election Symbols (Reservation and Allotment) Order, 1968, brought out by the Election Commission of India (ECI) makes a provision to deal with the violation of the Model Code of Conduct.
- 2. The Representation of People Act of 1951 declares any appeal in the name of any religion to be a corrupt practice that invalidates an election.
- 3. The suspension or removal of a party's recognition does not deprive it of the symbol reserved for 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.20) Consider the following statements:

- 1. The right to housing is considered part of the fundamental right to life under Article 21 of the Constitution.
- 2. Credit Linked Subsidy Scheme (CLSS), a component under the Pradhan Mantri Awas Yojana-Urban, focuses on slum rehabilitation.

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.21) Consider the following statements:

- 1. A live-in relationship is considered an offence under the India law.
- 2. In India, all the laws that are applicable to married couples also applies to couples living in live-in relationship.

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.22) Consider the following pairs:

Article-----Provisions

- 1. Article 22(1) ------Right to be informed of grounds of arrest.
- 2. Article 22(2) ------Right to consult and be defended by a legal practitioner.
- 3. Article 22(3) ------ Right to be produced before a magistrate within 24 hours.
- 4. Article 22(4) ------Exceptions for enemy aliens and those detained under preventive detention laws.

How many of the above pairs are correctly matched?

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

Q.23) Consider the following statements regarding the internet shutdowns in India:

- 1. Information Technology Act, 2000 is the primary legal framework governing internet shutdowns in India.
- 2. In Navtej Singh Johar v. Union of India, the Supreme Court provided guidelines to regulate internet shutdowns in India.
- 3. India has witnessed the highest number of internet shutdowns in the world in 2023.

How many of the statements given above are correct?

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



Q.24) With reference to the recent judgment of the Supreme Court on the Prevention of Money Laundering Act (PMLA), consider the following statements:

- 1. As per the SC, the Enforcement Directorate (ED) cannot arrest an accused after the special court has taken cognizance of the case.
- 2. The SC stated that the accused appearing in the special court is not exempted from future personal appearances.
- 3. The Enforcement Directorate may arrest a person not initially named as an accused in the complaint if it is necessary to carry out further investigations into the same offence.

How many of the statements given above are correct?

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

Q.25) Consider the following statements:

- 1. The right to property is a human right.
- 2. 42nd Constitutional Amendment removed the right to property as a fundamental right.
- 3. If state acquires a private property, then it must follow the due process and procedural rights to ensure fairness and justice in the acquisition process.

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.26) Consider the following statements:

- 1. The Indian Constitution provides for proportionate reservation based on population.
- 2. Ambedkar advocated for reservation policies that address economic and educational empowerment for all historically disadvantaged groups, irrespective of caste and religion.
- 3. Ambedkar also called for reservations in the private sector.

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

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

Q.27) Consider the following statements:

- 1. Donations received by registered parties are tax-exempted.
- 2. The Representation of the People Act (RP Act) grants powers to the Election Commission of India (ECI) to deregister political parties for failing to contest elections.
- 3. Under the Election Symbols Order, 1968, the ECI has the power to suspend or withdraw the recognition of a recognised political party for failing to observe the Model Code of Conduct (MCC).

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.28) Which of the following statements is/are correct?

- 1. Overseas Citizenship of India (OCI) card holders are free to stay in India without a visa.
- 2. OCI cardholders have the right to work in India without a work visa.

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.29) Consider the following statements:

- 1. Article 22 of the Indian Constitution mandates that an arrested person cannot be denied the right to consult, and to be defended by a legal practitioner of his choice.
- 2. The Prevention of Money Laundering Act (PMLA) and the Unlawful Activities Prevention Act (UAPA) do not require that the grounds for arrest be communicated to the accused.

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.30) Consider the following:

- 1. Power of majority
- 2. Equality and social justice
- 3. Active citizen participation
- 4. Process of deliberation and decision-making

How many of the above are core values of radical democracy?

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

Q.31) Consider the following statements:

- 1. Article 246 of the Indian Constitution provides the framework for the adjudication of inter-state water disputes in India.
- 2. The Inter-State River Water Disputes Act, 1956 is the primary legislation governing the resolution of inter-state water disputes 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

Q.32) Consider the following statements:

- 1. The Home Ministry has the overall responsibility for the security of the Parliament House Complex.
- 2. Parliament Security Service (PSS) accesses control and regulation of people, material, and vehicles within the Parliament House Complex.

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.33) Consider the following statements:

- 1. The Election Commission of India (ECI) decides the location of polling stations.
- 2. The ECI is responsible for the conduct of election to offices of the President and Vice-President of India.
- 3. The ECI is legally mandated to disclose the voter turnout data to the public.

How many of the statements given above are correct?

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

Q.34) Consider the following statements:

- 1. Institute of Chartered Accountants of India (ICAI) is a statutory body created by the Chartered Accountants Act of 1949.
- 2. Institute of Chartered Accountants of India (ICAI) operates under the under the administrative control of the Ministry of Commerce and Industry.
- 3. ICAI ranks as the largest professional body of chartered accountants globally.

How many of the statements given above are correct?

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

Q.35) With reference to the National Disaster Response Force (NDRF), consider the following statements:

- 1. NDRF has been constituted under the National Policy on Disaster Management Act, 2002.
- 2. It is primarily responsible for coordinating long-term reconstruction efforts after disasters.
- 3. NDRF is also responsible for distributing relief materials like food and water in the affected region.

How many of the statements given above are correct?

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

Q.36) Consider the following statements:

- 1. Ordinary laws are rules that are often framed by the different section of the society and they play an important role in governing the societies.
- 2. Constitutional principles frame fundamental rights which are of a higher order than ordinary laws that every citizen must obey.
- 3. Challenging social and economic deprivation and preserving equality of status are at the heart of India's constitutional project.

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.37) Consider the following pairs:

Types of Bail-----Specifications

- 1. Interim Bail------ Granted when police fail to complete investigation
- 2. Statutory Bail------ Temporary relief until the final decision
- 3. Anticipatory Bail-----Protection from arrest before it happens

How many of the above pairs are correctly matched?

- a) Only one pair
- b) Only two pairs
- c) All three pairs
- d) None of the pairs



Q.38) Consider the following statements:

- 1. Operation Vijay was launched by India to liberate Goa from Portuguese rule.
- 2. Goa was immediately granted statehood after liberation in 1961.

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.39) Consider the following statements:

- 1. Liberalism is a political and moral philosophy based on individual rights, liberty, and equality before the law.
- 2. Liberalism has always been a dominant ideology in Indian politics.
- 3. Raja Ram Mohan Roy was a prominent figure in the Indian liberal tradition.

How many of the statements given above are correct?

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

Q.40) Consider the following statements:

- 1. Under Article 324 of the Constitution, the Election Commission of India has significant powers to ensure free and fair elections.
- 2. The Representation of the People Act (RPA), 1951 provides for the punishments or penalties to the political parties for violating the Model Code of Conduct (MCC).

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 - (a)	3 – (c)	4 - (c)	5 – (a)	6 - (c)	7 – (c)	8 – (b)	9 - (c)	10 - (b)
11 - (b)	12 – (b)	13 – (b)	14 - (b)	15 – (c)	16 – (b)	17 – (c)	18 – (a)	19 – (a)	20 – (a)
21 - (d)	<mark>22 – (</mark> a)	23 – (a)	24 - (b)	25 – (c)	26 - (c)	27 – (c)	28 - (c)	29 – (a)	30 - (c)
31 - (b)	32 - (b)	33 – (b)	34 - (a)	35 – (a)	36 - (b)	37 - (a)	38 - (a)	39 - (b)	40 - (a)



Answers & Explanations

1. Correct Answer is (B)

- Statement 1 is incorrect. The right to strike is not a fundamental right of laborers in India, but a statutory right under the Industrial Disputes Act (IDA) of 1947 (now subsumed under the Industrial Relations Code, 2020).
- Statements 2 and 3 are correct. The Industrial Relations Code (CIR) of 2020, which consolidates and updates several labor laws, includes provisions for harsher penalties for illegal strikes. The new legislation aims to improve the ease of doing business and enhance labor market flexibility while also protecting workers' rights. India has ratified the Labour Statistics Convention (No. 160) of 1985 and the Labour Inspection Convention (081) of 1947 under the International Labour Organization.

Source: <u>The Hindu</u>

2. Correct Answer is (A)

- Only 2 is correctly matched.
- Article 31A- Provide those laws made for acquisition of estates, etc. shall not be void on the ground that it violated fundamental rights including the right to property.
- Article 31B-Made laws placed under the Ninth Schedule immune from the judicial review on the ground of violating fundamental rights. However, in Coelho case (2007), the SC held that laws placed in Ninth schedule after April 1973 would be subject to judicial review.
- Article 31C-Provided primacy to the DPSP under Article 30(b) and (c). Laws that made to fulfil these principles shall not be void on the ground that it violated fundamental rights including right to property.

Source: <u>The Hindu</u>

3. Correct Answer is (C)

• In the Minerva Mills Case (1980), the Supreme Court of India held that the Constitution requires a harmonious balance between Fundamental Rights and the Directive Principles of State Policy (DPSP). The court emphasized that both Fundamental Rights and DPSP are essential features of the Constitution and should be given equal importance.

Source: <u>The Hindu</u>

4. Correct Answer is (C)

• In India, the Narcotic Drugs and Psychotropic Substances Act (NDPS Act) of 1985 classifies cannabis as a prohibited substance. The act makes it illegal to cultivate, produce, possess, use, consume, purchase, sell, transport, warehouse, import, or export cannabis for recreational purposes. However, the cultivation of cannabis for industrial purposes, such as producing industrial hemp or for horticultural use, is legal in India.

Source: The Times of India

5. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The SLU is used to upload both the names and symbols of candidates contesting a particular seat onto the Voter Verified Paper Audit Trail (VVPAT). The Optical Scanner is not a component of the EVM system where SLUs are used. The EVM system primarily consists of the Ballot Unit, Control Unit, and VVPAT.
- Statement 3 is correct. According to recent directives from the Supreme Court, after the completion of the symbol loading process, SLUs must be sealed and stored in a container and kept in a strongroom along with EVMs for at least 45 days following the declaration of election results. This measure is intended to ensure the integrity and security of the election process.



Source: <u>The Hindu</u>

6. Correct Answer is (C)

- Statements 1 and 3 are correct. The Spice Board of India is a regulatory and export promotion agency for Indian spices. It operates under the Ministry of Commerce and Industry and focuses on the development and worldwide promotion of Indian spices. Spice Train is an online campaign initiated by the Spice Board of India to educate Indians about the country's rich spice heritage and promote the use of spices in daily life. The campaign aims to create awareness and appreciation for the diverse range of spices that India has to offer.
- Statement 2 is incorrect. The Spice Board of India does not set minimum retail prices for spices sold in India. Retail prices are typically determined by market forces such as demand and supply, as well as other factors like production costs, transportation, and government policies.

Source: <u>The Hindu</u>

7. Correct Answer is (C)

• A country's supremacy of law is maintained through the Rule of Law. The principle states that all, including the government and its representatives are subject to and accountable under the same laws. In turn, this ensures justice, fairness, transparency, and equal protection for all while diminishing chances of arbitrary decision-making by those in authority as well as abuse of power.

Source: <u>The Hindu</u>

8. Correct Answer is (B)

- Statement 1 is incorrect. Section 123 of the Representation of the People (RP) Act stipulates several forms of corruption such as bribery, undue influence, communal appeals among others. However, giving out freebies is not specifically thought as corruption under the Act.
- Statement 2 is correct. The Model Code of Conduct (MCC) is a set of rules laid down by India's Election Commission to guide political parties and candidates during elections. One of the key aspects of these rules is that they ban politicians from using appeals to caste, religion, or ethnic identity to attract votes. This is done to ensure elections remain fair and impartial, keeping the focus on policies and governance rather than divisive tactics.

Source <u>The Hindu</u>

9. Correct Answer is (C)

• Statements 1 and 2 are correct. The online gaming industry in India has witnessed substantial growth in recent years, driven by factors such as increasing internet penetration, affordable data plans, and a growing interest in competitive gaming and esports. The IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, have been updated to include specific provisions for the online gaming industry. These amendments introduce regulations concerning the operation of online games, including the establishment of self-regulatory bodies, obligations for online gaming platforms to ensure user safety, and compliance requirements for online real money games.

Source: The Hindu

10. Correct Answer is (B)

• Article 25 of the Indian Constitution guarantees the freedom of conscience and the right to profess, practice, and propagate religion. This constitutional provision supports the recognition of Sarna as a separate religion since it acknowledges the rights of individuals to follow their religious beliefs.

Source: <u>The Hindu</u>

11. Correct Answer is (B)

• Statement 1 is incorrect. The World Health Organization (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.



• Statements 2 and 3 are correct. While there are guidelines and some legal provisions related to end-of-life care, India lacks a comprehensive law specifically covering end-of-life care. The existing guidelines and provisions are part of broader health policies or are derived from court rulings rather than standalone legislation. The Supreme Court of India has recognized the right to die with dignity as part of the right to life under Article 21 of the Constitution.

Source: <u>The Hindu</u>

12. Correct Answer is (B)

- Statements 1 and 2 are correct. The Indian Constitution, particularly the Preamble and Part III (Fundamental Rights), emphasizes equality and prohibits discrimination based on various factors, including birth. Additionally, Directive Principles of State Policy (Part IV) encourage affirmative action to address social and economic inequalities. High levels of inequality can contribute to political polarization and increased societal conflict. Inequality can exacerbate tensions between different economic classes, leading to dissatisfaction and unrest. It can also create divisions along socio-economic lines that are often exploited by political parties for electoral gain.
- Statement 3 is incorrect. An inheritance tax, also known as an estate tax or death tax, is imposed on the net value of an individual's estate after their death and before the distribution of the assets to the beneficiaries. It is not imposed every year and does not focus on annual income from wages. Instead, it is a one-time tax levied on the inherited assets after an individual's demise. The primary purpose of an inheritance tax is to reduce wealth concentration across generations and promote economic equality.

Source: <u>The Hindu</u>

13. Correct Answer is (B)

- Statements 1 and 4 are correct. The right to vote in India is governed by the Representation of the People Act, 1951 (RP Act). This Act lays down the conditions under which Indian citizens can vote in elections and specifies rules regarding who is disqualified from voting. Prisoners held under preventive detention are allowed to vote in elections. The Representation of the People Act, 1951, specifically exempts persons detained under preventive detention laws from the restrictions that apply to other prisoners regarding the right to vote.
- Statements 2 and 3 are incorrect. According to Section 62(5) of the Representation of the People Act, anyone confined in prison, whether as a convict or an undertrial, is disqualified from voting. Convicts under prison in India can contest elections, although they cannot vote. Convicts with sentences of less than two years are permitted to contest, while those with longer sentences or disqualified for other reasons (e.g., convicted of serious crimes) cannot.

Source: The Hindu

14. Correct Answer is (B)

- Statements 1 and 5 are incorrect. Parliament's power to amend the Constitution is not unlimited. The Supreme Court of India established the "Basic Structure Doctrine" in the Kesavananda Bharati v. State of Kerala case (1973), which limits Parliament's power to amend the Constitution. According to this doctrine, Parliament cannot alter or destroy the basic structure of the Constitution, which includes fundamental features like federalism, secularism, democracy, and the independence of the judiciary. Article 13 of the Indian Constitution declares that any law made in breach of a fundamental right would be void, not valid. This article ensures the supremacy of fundamental rights over any other law that is inconsistent with them.
- Statements 2, 3 and 4 are correct. Article 31C of the Indian Constitution, inserted by the 25th Amendment Act of 1971, states that laws made to give effect to the directive principles specified in Article 39(b) and (c) cannot be declared void on the grounds of contravening the fundamental rights conferred by Article 14 or Article 19. Articles 14, 19, and 21 are collectively known as the "golden triangle" of the Indian Constitution. These articles provide a broad spectrum of protection



against unrestricted state power and are fundamental in safeguarding individual rights against arbitrary actions. Article 37 of the Indian Constitution states that the Directive Principles of State Policy (DPSP) outlined in Part IV of the Constitution are not enforceable by any court.

Source: <u>The Hindu</u>

15. Correct Answer is (C)

• The primary objective of the Karmayogi Competency Model is to enhance the skills, competencies, and capabilities of public servants. It is part of the Mission Karmayogi program, which aims to improve state execution capacity and promote continuous learning and growth among government officials. The model focuses on developing domain knowledge beyond the administrative scope of the bureaucracy to create a competent and future-ready civil service that can effectively deliver public services.

Source: <u>The Hindu</u>

16. Correct Answer is (B)

- Statements 1 and 3 are correct. The Indra Sawhney Case (1992) established the concept of the "creamy layer" to exclude affluent individuals from the Other Backward Classes (OBC) category benefiting from reservations. In the Janhit Abhiyan Case (2022), the Supreme Court upheld the constitutional validity of reservations based on economic criteria. The Court ruled that the 103rd Amendment to the Constitution, which introduced a 10% quota for the Economically Weaker Sections (EWS) in government jobs and educational institutions, does not violate the basic structure of the Constitution.
- Statement 2 is incorrect. Articles 15 and 16 of the Indian Constitution prohibit discrimination based on religion. These articles allow reservations for Scheduled Castes (SC), Scheduled Tribes (ST), and Other Backward Classes (OBC) to achieve social and educational equality. Religion is not a criterion for reservation.

Source: <u>The Hindu</u>

17. Correct Answer is (C)

• Statements 1 and 2 are correct. The concept of free and fair elections is considered an integral part of the basic structure of the Indian Constitution, as per various judgments of the Supreme Court. This means that this principle cannot be violated or amended by any law or action. Free and fair elections are the foundation of democracy and ensure that citizens have a voice in choosing their representatives. The Constitution, through Article 324, establishes the Election Commission of India as an independent body. This article empowers the Commission to conduct and control elections to Parliament and state legislatures and prepare electoral rolls. The Commission enjoys broad powers to ensure free and fair elections, including issuing directions and instructions to ensure ethical practices and prevent electoral malpractices.

Source: <u>The Hindu</u>

18. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The Model Code of Conduct (MCC) was not directly framed based on any specific Supreme Court judgment. It originated in Kerala in 1960 and was later adopted and implemented across other states in India. The Election Commission of India (ECI), along with the Law Ministry and political parties, reached a consensus on a comprehensive Model Code of Conduct in 1974. The model code of conduct is not legally enforceable. It is a set of guidelines issued by the Election Commission of India to ensure fair play in elections. While it has moral and ethical implications, there are no legal provisions that enforce the MCC directly. Violations of the MCC are dealt with by the ECI through measures such as censure or reprimands, but these do not involve legal penalties or court actions.



Commission based on a consensus among political parties and is enforced through the moral and administrative authority of the ECI rather than through statutory provisions.

Source: <u>The Hindu</u>

19. Correct Answer is (A)

- Statements 1 and 2 are correct. The Election Symbols (Reservation and Allotment) Order, 1968, brought out by the Election Commission of India (ECI), makes provisions to deal with violations of the Model Code of Conduct. Paragraph 16A of the Symbols Order states that the ECI can suspend or withdraw recognition of a political party for violations of the Model Code of Conduct, which directly impacts the party's ability to use its reserved symbol during elections. The Representation of the People Act, 1951, specifically under Section 123(3), declares that any appeal by a candidate or any other person with the consent of the candidate or his election agent to vote or refrain from voting on the ground of religion, race, caste, community, or language is a corrupt practice. Such practices are sufficient grounds to annul the election in which such an appeal was made.
- Statement 3 is incorrect. The suspension or removal of a party's recognition deprives it of the symbol reserved for it. According to the Election Symbols (Reservation and Allotment) Order, 1968, if a party's recognition is suspended or withdrawn, it loses the right to use the symbol that had been reserved for it.

Source: <u>The Hindu</u>

20. Correct Answer is (A)

- Statement 1 is correct. The Supreme Court of India has interpreted the right to life under Article 21 of the Constitution to include the right to adequate housing. This interpretation expands the scope of Article 21 to ensure a dignified life for all citizens.
- Statement 2 is incorrect. The Credit Linked Subsidy Scheme (CLSS) under the Pradhan Mantri Awas Yojana-Urban (PMAY-U) is designed to provide interest subsidies on housing loans to eligible beneficiaries from Economically Weaker Sections (EWS), Low Income Groups (LIG), and Middle-Income Groups (MIG). It does not specifically focus on slum rehabilitation. The component of PMAY-U that focuses on slum rehabilitation is the In Situ Slum Redevelopment (ISSR).

Source: <u>The Hindu</u>

21. Correct Answer is (D)

- Statement 1 is incorrect. India does not have specific laws that directly address live-in partnerships. However, the Supreme Court of India has played a crucial role in recognizing and legitimizing live-in relationships through various judgments.
- Statement 2 is incorrect. While couples in live-in relationships in India receive certain legal protections, they are not covered by all the laws that apply to married couples. The legal framework for live-in relationships is not as comprehensive as that for marriage.

Source: <u>The Hindu</u>

22. Correct Answer is (A)

- Only 1 is correctly matched.
- Article 22(2) Every person who is arrested and detained in custody shall be produced before the nearest magistrate within a period of twenty-four hours.
- Article 22(3) Exceptions for enemy aliens and preventive detention from Clauses 1 and 2.
- Article 22(4) Conditions for extending preventive detention.

Source: <u>The Hindu</u>

23. Correct Answer is (A)

• Statements 1 and 2 are incorrect. The primary legal framework governing internet shutdowns in India is the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules,



2017, under the Indian Telegraph Act, 1885. In Anuradha Bhasin v. Union of India (2020), the Supreme Court provided guidelines to regulate internet shutdowns in India.

• Statement 3 is correct. According to the Keep It On coalition, India witnessed the highest number of internet shutdowns globally in 2023, with 116 instances. This marks the sixth consecutive year that India has held this record.

Source: <u>The Hindu</u>

24. Correct Answer is (B)

- Statements 1 and 3 are correct. The Supreme Court ruled that the ED cannot arrest an accused under Section 19 of the PMLA after a special court has taken cognizance of the complaint. If the ED requires custody of the accused, it must apply to the special court and provide specific grounds for custodial interrogation. The Supreme Court clarified that if the ED wants to conduct further investigation concerning the same offence, it may arrest a person not shown as an accused in the complaint, provided the requirements of Section 19 of the PMLA are fulfilled.
- Statement 2 is incorrect. The Supreme Court's judgment provides that an accused who appears in the special court can be exempted from future personal appearances. The special court can grant exemption from personal appearance by exercising its power under Section 205 of the CrPC.

Source: <u>The Hindu</u>

25. Correct Answer is (C)

- Statements 1 and 3 are correct. The right to property is recognized as a human right along with Constitutional right. The Supreme Court of India has affirmed that the right to own private property is a human right. The state must follow due process and procedural rights to ensure fairness and justice when acquiring private property. The Supreme Court has emphasized that compulsory acquisition without following mandatory procedures and providing fair compensation is unconstitutional.
- Statement 2 is incorrect. The 44th Amendment Act of 1978 reclassified the right to property as a constitutional right under Article 300A.

Source: <u>The Hindu</u>

26. Correct Answer is (C)

- Statement 1 is incorrect. The Indian Constitution does not support proportionate reservation based on population. While it does provide for reservations for Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs), these reservations are not strictly based on population proportions but rather on social and educational backwardness. The Constitution supports affirmative action for certain sections of society, but it does not endorse proportionate representation based on population.
- Statements 2 and 3 are correct. B.R. Ambedkar's vision for reservations aimed to uplift marginalized communities by providing them with opportunities for social, economic, and educational advancement. While his primary focus was on addressing caste-based inequalities, he emphasized the importance of inclusive policies that benefit all disadvantaged groups, regardless of their religious affiliations. Dr. B.R. Ambedkar was a strong advocate for extending reservations to the private sector to address discrimination and ensure equitable opportunities for marginalized communities. He believed that discrimination was more rampant in the private sector than in the public sector, and thus, reservations should be extended to private enterprises as well.

Source: <u>The Hindu</u>

27. Correct Answer is (C)

• Statements 1 and 3 are correct. Donations received by registered political parties are tax-exempt under Section 13A of the Income Tax Act, 1961, provided they file their Income Tax Returns



annually along with their audited accounts, income/expenditure details, and balance sheet. Under Paragraph 16A of the Election Symbols (Reservation and Allotment) Order, 1968, the ECI has the power to suspend or withdraw the recognition of a recognised political party for failing to observe the MCC or follow lawful directions of the Commission.

• Statement 2 is incorrect. The RP Act does not confer explicit powers on the ECI to deregister political parties for failing to contest elections. The Supreme Court in Indian National Congress versus Institute of Social Welfare & Ors (2002) held that the ECI does not have the power to deregister any political party under the RP Act, except under exceptional circumstances such as registration obtained by fraud, the party ceasing to have allegiance to the Constitution, or being declared unlawful by the Government.

Source: <u>The Hindu</u>

28. Correct Answer is (C)

• Statements 1 and 2 are correct. OCI cardholders are allowed to stay in India for any length of time without the need for a visa. They are granted multiple entries and lifelong visa-free travel to India. This means they can stay in India for any length of time without needing to obtain a visa each time they enter the country. OCI cardholders have the right to work in India without the need for a separate work visa. They have the right to pursue most professions in India, including employment and educational opportunities, similar to Indian citizens, with a few exceptions in areas such as public services and certain government positions.

Source: The Times of India

29. Correct Answer is (A)

- Statement 1 is correct. Article 22 of the Constitution mandates that no person can be detained without being informed of the grounds for their arrest and must have the right to consult and be defended by a legal practitioner of their choice.
- Statement 2 is incorrect. Both the PMLA and the UAPA require that the grounds for arrest be communicated to the accused. Section 19 of the PMLA mandates that the reasons for arrest must be recorded in writing and communicated to the accused. Similarly, Section 43B (1) of the UAPA requires that the grounds of arrest be communicated to the accused.

Source: <u>The Hindu</u>

30. Correct Answer is (C)

• Radical democracy is a type of democracy that pushes for a more extreme extension of equality and liberty compared to traditional democracy. While the "power of the majority" is a foundational aspect of democratic decision-making, radical democracy goes beyond simply following the majority and seeks to consider the voices of all, including minority viewpoints.

Source: <u>The Hindu</u>

31. Correct Answer is (B)

- Statement 1 is incorrect. Article 262 of the Indian Constitution provides the framework for the adjudication of inter-state water disputes in India. Article 246 of the Indian Constitution deals with the subject matter of laws made by Parliament and the state legislatures. It outlines the Union, State, and Concurrent lists, specifying the respective legislative powers.
- Statement 2 is correct. The Inter-State River Water Disputes Act, 1956 is the primary legislation governing the resolution of inter-state water disputes in India. This Act empowers the Central Government to establish tribunals for the adjudication of such disputes upon the request of the concerned state governments.

Source: <u>The Hindu</u>

32. Correct Answer is (B)



- Statement 1 is incorrect. The overall security of the Parliament House Complex is administered by the Lok Sabha Secretariat and the Speaker of the Lok Sabha has the overall responsibility for the security of the Parliament House Complex.
- Statement 2 is correct. The Parliament Security Service (PSS) is the primary agency responsible for access control, regulation, and security within the Parliament premises. It is the in-house security force responsible for safeguarding the Parliament House Complex in India. The Parliament Security Service, headed by Joint Secretary (Security), looks after the security set up in the Indian Parliament House complex.

Source: <u>The Hindu</u>

33. Correct Answer is (B)

- Statements 1 and 2 are correct. The Election Commission of India, through the district election officers, decides the location of polling stations. The principles and procedures for setting up polling stations are guided by the Representation of the People Act, 1951, and other guidelines issued by the ECI. The Election Commission of India is responsible for conducting elections to the offices of the President and Vice-President of India, as per Article 324 of the Constitution of India.
- Statement 3 is incorrect. The Election Commission of India has stated that there is no legal mandate to provide final voter turnout data of all polling stations to the public. The data is provided to candidates or their agents, but not necessarily disclosed to the general public.

Source: <u>The Hindu</u>

34. Correct Answer is (A)

- Statement 1 correct. The ICAI was established under the Chartered Accountants Act, 1949, which was enacted by the Parliament of India to regulate the profession of Chartered Accountants in India.
- Statements 2 and 3 are incorrect. The ICAI operates under the administrative control of the Ministry of Corporate Affairs. The ICAI is the second largest professional body of Chartered Accountants in the world.

Source: Forum IAS

35. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The NDRF was constituted under the Disaster Management Act, 2005. The primary mandate of the NDRF is to provide specialized response to natural and manmade disasters, not long-term reconstruction efforts. Long-term reconstruction is coordinated by other agencies.
- Statement 3 is correct. The NDRF is involved in distributing relief materials such as food packets, dry rations, drinking water, and medicines in disaster-affected regions.

Source: AIR

36. Correct Answer is (B)

- Statement 1 is incorrect. Ordinary laws are enacted by legislative bodies such as the Parliament or State Legislatures, not by different sections of society. These laws govern various aspects of society and are subordinate to constitutional laws.
- Statements 2 and 3 are correct. Constitutional principles frame fundamental rights, which are considered to be of a higher order than ordinary laws. These rights are enshrined in the Constitution and are meant to protect the basic freedoms and rights of individuals. In India, fundamental rights are outlined in Part III of the Constitution and are enforceable by the judiciary. The Indian Constitution aims to address social and economic inequalities and ensure equality of status and opportunity for all citizens. This is reflected in various provisions, including the Preamble, which emphasizes justice, liberty, equality, and fraternity, and in the Directive Principles of State Policy, which guide the state in promoting social and economic welfare.



Source: <u>The Hindu</u>

37. Correct Answer is (A)

- **Interim Bail**: This is a temporary relief granted to an accused person until the final decision on regular or anticipatory bail is made. It is not related to the completion of the investigation by the police.
- **Statutory Bail**: Also known as default bail, it is granted when the police fail to complete the investigation within a specified period, as per Section 167(2) of the Criminal Procedure Code (CrPC).
- **Anticipatory Bail**: This type of bail is granted to protect an individual from arrest before it happens, under Section 438 of the CrPC.

Source: <u>The Hindu</u>

38. Correct Answer is (A)

- Statement 1 is correct. Operation Vijay was the code name for the military action launched by India to liberate Goa, Daman, and Diu from Portuguese rule in December 1961.
- Statement 2 is incorrect. After liberation in 1961, Goa was not immediately granted statehood. Instead, it was administered as a Union Territory along with Daman and Diu. Goa was granted statehood on May 30, 1987.

Source: AIR

39. Correct Answer is (B)

- Statements 1 and 3 are correct. Liberalism emphasizes the importance of individual freedoms, rights, and equality before the law. Raja Ram Mohan Roy is often regarded as a pioneer of modern Indian liberalism and was instrumental in social reform movements in India.
- Statement 2 is incorrect. While liberalism has played a significant role in India's social and political reforms, it has not always been the dominant ideology in Indian politics. Various other ideologies, including socialism and nationalism, have also been influential.

Source: <u>The Hindu</u>

40. Correct Answer is (A)

- Statement 1 is correct. Article 324 of the Constitution gives the Election Commission of India (ECI) significant powers of "superintendence, direction, and control" over elections to Parliament, State Legislatures, and the offices of President and Vice President. This includes the power to take necessary actions to ensure free and fair elections.
- Statement 2 is incorrect. The Representation of the People Act (RPA), 1951 does not contain provisions to punish political parties for violating the Model Code of Conduct (MCC). The MCC is a set of guidelines issued by the ECI, but it is not a statutory document. Violations of the MCC do not attract punitive action under the RPA.

Source: <u>The Hindu</u>



Acts & Policies

Q.1) Which of the following statements is/are correct?

- 1. The PM SVANidhi scheme provides subsidized housing loans to street vendors.
- 2. The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act 2014, aims to protect and regulate street vending, focusing on both the livelihoods of vendors and the regulation of vending activities in cities.

Select the correct answer using the code given below:

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

Q.2) With reference to the Open Market Sale Scheme (OMSS), consider the following statements:

- 1. The scheme aims to sell surplus stocks of food grains, primarily wheat and rice, from the central pool in the open market at predetermined prices.
- 2. Department of Agriculture and Farmers' Welfare is responsible for conducting the OMSS.
- 3. The OMSS sales are conducted through e-auctions on a designated platform.

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) With reference to the Protection of Children from Sexual Offences (POCSO) Act 2012, consider the following statements:

- 1. It provides a legal framework for the protection of children from sexual offences.
- 2. Right to confront the accused is a right guaranteed to a child victim under the POCSO Act.
- 3. Under the Act, any person below the age of 18 is considered a child.

How many of the statements given above are correct?

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

Q.4) Which one of the following was the first state to introduce menstrual leave for women?

- a) Kerala
- b) Tamil Nadu
- c) Bihar
- d) Maharashtra

Q.5) With reference to the Pradhan Mantri Jan Arogya Yojana (PMJAY), consider the following statements:

- 1. The scheme aims to provide health insurance coverage to the economically weaker sections of society, ensuring access to quality healthcare services.
- 2. Preventive health checkups and vaccinations are covered under PMJAY.
- 3. There are no caps on family size, age, or the number of members in a family.
- 4. It aligns with the Sustainable Development Goals (SDGs) by promoting good health and well-being.

How many of the statements given above are correct?

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



Q.6) Consider the following statements:

- 1. The Jandhan, Aadhaar & Mobile (JAM) framework aims to enhance national security and citizen identification.
- 2. The PM SVANidhi Yojana is a scheme launched by the government to extend collateral-free working capital loans to street vendors.

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) Consider the following statements:

Statement-I: India has established a comprehensive policy on palliative care.

Statement-II: The National Health Mission (NHM) includes palliative as one of its objectives.

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.8) Consider the following statements regarding Bar Council of India's (BCI) Rules for Registration and Regulation of Foreign Lawyers and Foreign Law Firms in India, 2022:

- 1. Under the BCI Rules, foreign lawyers are allowed to appear before Indian courts, tribunals, or statutory authorities.
- 2. Under the BCI Rules, foreign lawyers and firms can engage in transactional or corporate work such as joint ventures, mergers and acquisitions, and intellectual property matters on a reciprocal basis.

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.9) The goal of the "Give It Up" campaign launched by the Indian government is to:

- a) Increase government revenue through additional taxes on Liquefied Petroleum Gas (LPG).
- b) Encourage affluent households to willingly give up their LPG subsidies.
- c) Mandate all households to purchase LPG at market prices.
- d) Provide free LPG connections to all households regardless of income.

Q.10) With reference to the Inter-Services Organisations (ISOs) (Command, Control, and Discipline) Act 2023, consider the following statements:

- 1. It seeks to empower the Commander-in-Chief and Officer-in-Command of Inter-Services Organisations (ISOs) with disciplinary and administrative powers over personnel from all three services (Army, Navy, and Air Force).
- 2. Under the Act, the President of India is empowered to appoint the Chief of Staff of an ISO.
- 3. The Act empowers the Commander-in-Chief and Officer-in-Command of ISOs to initiate disciplinary and administrative actions against personnel, irrespective of their parent service.

How many of the statements given above are correct?

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



Q.11) With reference to the Vibrant Village Programme (VVP), which of the following statement(s) is/are correct?

- 1. The programme aims to enhance the defense capabilities of border villages.
- 2. Creation of opportunities for livelihood generation through promotion of tourism & cultural heritage, skill development & entrepreneurship are included under the programme.
- 3. Hub and spoke model is a concept used in VVP to promote large-scale industrial development in border areas.

Select the correct answer using the codes given below:

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

Q.12) With reference to the DigiLocker platform, consider the following statements:

- 1. It is a digital platform developed by the government to facilitate the paperless storage and access of essential documents for Indian citizens.
- 2. As per the Information Technology Rules 2016, documents issued through DigiLocker do not hold the same legal status as their original physical document.
- 3. DigiLocker is part of Digital India's vision to ensure that citizens have a secure document access platform in the cloud.

4. The DigiLocker is mandatory for passport processing.

How many of the statements given above are correct?

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

Q.13) With reference to the Mediation Act 2023, consider the following statements:

- 1. The objective of the Act is to promote and facilitate mediation, especially institutional mediation.
- 2. The Act applies to the International Mediation that includes India.
- 3. The Act established the 'Arbitration Council of India' to regulate mediators and mediation institutions.

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.14) Consider the following statements regarding the Smart Cities Mission (SCM):

- 1. It aims to promote the development of sustainable and citizen-friendly cities across the country.
- 2. The central government provides financial and technical assistance to selected cities.
- 3. The Mission imposes stricter regulations on industrial activities within city limits.

How many of the statements given above are correct?

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

Q.15) Which one of the following the goal of the '75/25' initiative?

- a) Provide free healthcare services to all citizens
- b) Screen and provide standard care to 75 million individuals suffering from hypertension and diabetes by 2025
- c) Reduce the cost of healthcare services by 75%
- d) Increase the number of healthcare professionals by 25%



Q.16) With reference to the Open Network for Digital Commerce (ONDC), consider the following statements:

- 1. It aims to promote open networks for all aspects of the exchange of goods and services over digital or electronic networks.
- 2. Blockchain technology is used by ONDC use to establish its network.
- 3. ONDC is a government owned corporation that requires buyers and sellers to use the same platform for transactions.
- 4. Real Estate is one of the focus areas under ONDC's operations.

How many of the statements given above are correct?

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

Q.17) With reference to the Scheme for Care and Support to Victims notified under Section 4 & 6 of the Protection of Children from Sexual Offences (POCSO) Act 2012, how many of the following statements are correct?

- 1. It covers all pregnant girl victims under the mentioned sections of the POCSO Act.
- 2. It is mandatory for the girl child victim to have a copy of the FIR registered under the POCSO Act.
- 3. Under the scheme, the Child Welfare Committee informs the girl child about the process of surrender.

Select the correct answer using the codes given below:

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

Q.18) The primary objective of the 'Samrakshan Programme' is to:

- a) Improve access to prenatal vitamins for pregnant women.
- b) Reduce perinatal mortality and improve birth outcomes.
- c) Promote the use of traditional birthing practices.
- d) Promote the use of advanced imaging technologies in urban areas.

Q.19) Consider the following statements with respect to the Agnipath scheme:

- 1. It aims to recruit youth for a short-term service in the armed forces.
- 2. Under the Agnipath scheme, the duration of service for Agniveers is four years.
- 3. Pension is provided to the Agniveers under the Agnipath scheme.

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.20) With reference to the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN) scheme, consider the following statements:

- 1. The scheme specifically targets Particularly Vulnerable Tribal Groups (PVTGs).
- 2. Registration for the PM JANMAN Housing scheme requires a job card.
- 3. Under the scheme, free laptops will be distributed to all PVTGs students.

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.21) Consider the following statements:

- 1. The primary objective of the National Menstrual Hygiene Policy (NMHP) is to ensure access to affordable, safe, and hygienic menstrual products.
- 2. Although India has made progress in handling menstrual hygiene, the requirements of women in prisons are mostly overlooked.

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.22) Consider the following statements in respect of 'National Programme for Prevention and Control of Deafness':

- 1. The program aims to prevent and treat hearing impairment and provide medical rehabilitation.
- 2. The program aims to develop a national network of hearing aid manufacturers.
- 3. The program includes training in Indian Sign Language (ISL).

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. Pradhan Mantri Jan Arogya Yojana (PM-JAY) is the world's largest health assurance scheme.
- 2. India launched the Ayushman Bharat initiative to promote Universal Basic Income (UBI).
- 3. India has emerged as a leading country in digital public goods.

Which of the statements given above are correct?

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

Q.24) With reference to the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) Scheme, consider the following statements:

- 1. It aims to ensure that every household has access to a tap with assured water supply and a sewerage connection.
- 2. Ministry of Housing and Urban Affairs is responsible for the implementation of the AMRUT scheme.
- 3. AMRUT 2.0 aims to make cities pollution free and plant trees across the cities.

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



1 – (b)	2 – (c)	3 – (b)	4 - (c)	5 – (c)	6 – (b)	7 – (d)	8 – (b)
9 – (b)	10 - (b)	11 – (b)	12 - (b)	13 - (a)	14 - (b)	15 – (b)	16 - (b)
17 - (b)	18 - (b)	19 – (a)	20 – (a)	21 - (c)	22 - (a)	23 – (c)	24 - (a)
							5)

Answer Key

Answers & Explanations

1. Correct Answer is (B)

- Statement 1 is incorrect. The PM SVANidhi scheme does not provide subsidized housing loans to street vendors. Instead, it is a micro-credit scheme that offers collateral-free working capital loans of up to ₹10,000 to street vendors to help them resume their livelihoods, which were adversely affected by the COVID-19 pandemic. The scheme aims to provide financial assistance to street vendors and support their economic recovery.
- Statement 2 is correct. The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act 2014 aims to protect and regulate street vending, focusing on both the livelihoods of vendors and the regulation of vending activities in cities. The Act provides for the protection of livelihood rights, social security, and the regulation of urban street vending. It also establishes guidelines for the allocation of vending zones and the issuance of licenses and permits to street vendors.

Source: The Hindu

2. Correct Answer is (C)

- Statements 1 and 3 are correct. The Open Market Sale Scheme (OMSS) aims to sell surplus stocks of food grains, primarily wheat and rice, from the central pool in the open market at predetermined prices. This is done to control prices in the market and ensure food security. The OMSS sales are conducted through e-auctions on a designated platform, such as the National Commodity and Derivatives Exchange Limited (NCDEX). This ensures transparency and efficiency in the auction process.
- Statement 2 is incorrect. The Food Corporation of India (FCI), under the Ministry of Consumer Affairs, Food & Public Distribution, is responsible for conducting the OMSS.

Source: The Times of India

3. Correct Answer is (B)

- Statements 1 and 3 are correct. The POCSO Act, 2012 is a law that aims to protect children from various forms of sexual abuse and exploitation, providing a robust legal framework for their protection. The POCSO Act defines a child as any person below the age of 18 years. It is applicable to both male and female children, ensuring protection from various forms of sexual offences and providing stringent penalties for offenders.
- Statement 2 is incorrect. The POCSO Act is designed to be child-friendly and ensures that the child victim is protected throughout the judicial process. The Act specifically provides that the child should not be exposed directly to the accused during testimony, often using methods such as video



conferencing to record statements or using a screen to shield the child. This is to ensure the child's comfort and to prevent re-traumatization.

Source: <u>The Hindu</u>

4. Correct Answer is (C)

• Bihar was the first state in India to introduce menstrual leave in the early 1990s, under the leadership of then Chief Minister Lalu Prasad Yadav. The policy granted female employees two days of paid leave per month.

Source: <u>The Hindu</u>

5. Correct Answer is (C)

- Statements 1, 3 and 4 are correct. PMJAY, also known as Ayushman Bharat Yojana, is designed to provide health insurance coverage of up to ₹5 lakh per family per year for secondary and tertiary care hospitalization to over 50 crore beneficiaries from economically weaker sections. One of the key features of PMJAY is that there are no restrictions on family size, age, or the number of members in a family. All pre-existing conditions are covered from day one, and the scheme aims to be inclusive by covering all members of eligible families. PMJAY aligns with the Sustainable Development Goals, particularly Goal 3, which aims to ensure healthy lives and promote well-being for all at all ages.
- Statement 2 is incorrect. PMJAY primarily focuses on secondary and tertiary care hospitalization, covering a wide range of medical and surgical conditions. However, it does not cover preventive health checkups, vaccinations, or outpatient services. The scheme is designed to provide financial protection against catastrophic health expenditure due to hospitalization, rather than preventive care.

Source: <u>The Hindu</u>

6. Correct Answer is (B)

- Statement 1 is incorrect. The Jandhan, Aadhaar & Mobile (JAM) framework primarily aims to enhance financial inclusion by linking Jan Dhan accounts, Aadhaar numbers, and mobile numbers to streamline and secure the delivery of government subsidies and services directly to the beneficiaries, thereby reducing leakages and ensuring that benefits reach the intended recipients. It does not specifically aim to enhance national security and citizen identification.
- Statement 2 is correct. The PM SVANidhi Yojana (Pradhan Mantri Street Vendor's AtmaNirbhar Nidhi) is a scheme launched by the Indian government to provide collateral-free working capital loans to street vendors affected by the COVID-19 pandemic. This scheme aims to support street vendors in resuming their businesses by offering financial assistance and promoting digital transactions.

Source: The Times of India

7. Correct Answer is (D)

- Statement-I is incorrect. While there have been efforts and initiatives like the National Program for Palliative Care (NPPC) to improve palliative care, India lacks a comprehensive, fully implemented national policy specifically dedicated to palliative care. India has a limited palliative care policy and palliative care is not systematically incorporated into the healthcare system.
- Statement-II is correct. The National Health Mission, particularly through its components like the National Program for Palliative Care, aims to integrate palliative care into the broader health care framework. The NHM supports palliative care initiatives as part of its mission to provide comprehensive health services.

Source: <u>The Hindu</u>

8. Correct Answer is (B)



- Statement 1 is incorrect. The BCI Rules do not allow foreign lawyers to directly appear before Indian courts, tribunals, or statutory bodies. They can only practice in association with a registered Indian lawyer.
- Statement 2 is correct. The BCI Rules allow foreign lawyers and law firms to engage in transactional or corporate work such as joint ventures, mergers and acquisitions, and intellectual property matters on a reciprocal basis. This means that foreign lawyers and law firms can practice these areas of law in India only if their home countries allow Indian lawyers and law firms to do the same.

Source: <u>The Hindu</u>

9. Correct Answer is (B)

• The "Give It Up" campaign, launched by the Indian government in 2015, aims to encourage affluent households to voluntarily give up their LPG (liquefied petroleum gas) subsidies. The primary goal is to reduce the government's subsidy burden and enable the saved resources to be utilized for providing LPG connections to poorer households. The campaign promotes a sense of social responsibility among citizens and supports the government's efforts to ensure clean cooking fuel access for all.

Source: <u>The Hindu</u>

10. Correct Answer is (B)

- Statements 1 and 3 are correct. The Act seeks to empower the Commander-in-Chief and Officer-in-Command of Inter-Services Organisations (ISOs) with disciplinary and administrative powers over personnel from all three services (Army, Navy, and Air Force). This empowerment allows them to exercise command and control over the personnel serving in or attached to ISOs, ensuring proper discharge of duties and maintenance of discipline. It empowers the Commander-in-Chief and Officer-in-Command of ISOs to initiate disciplinary and administrative actions against personnel, irrespective of their parent service. This provision is aimed at ensuring uniformity and expediency in disciplinary proceedings within ISOs.
- Statement 2 is incorrect. The Act does not grant the President the authority to appoint the Chief of Staff of an ISO. The power likely lies with the senior-most officer from the dominant service within the specific ISO.

Source: <u>The Hindu</u>

11. Correct Answer is (B)

- Statements 1 and 3 are incorrect. VVP focuses on improving the quality of life, economic development, and infrastructure in border villages to prevent out-migration and indirectly support border security by maintaining populated border areas. The hub and spoke model in the context of VVP is used to promote social entrepreneurship and not large-scale industrial development. It aims to develop growth centers that facilitate social entrepreneurship, empowerment of youth and women through skill development, and leverage tourism potential.
- Statement 2 is correct. VVP includes the creation of opportunities for livelihood generation through the promotion of tourism, cultural heritage, skill development, and entrepreneurship. These efforts are aimed at improving the economic conditions and quality of life in the border villages.

Source: <u>The Hindu</u>

12. Correct Answer is (B)

• Statements 1 and 3 are correct. DigiLocker is a digital platform developed by the Indian government aimed at facilitating the paperless storage and access of essential documents, supporting the government's initiative towards a paper-free environment. DigiLocker is a flagship



initiative under the Digital India programme, which aims to provide citizens with a secure document access platform on a public cloud.

• Statements 2 and 4 are incorrect. According to the Information Technology (Preservation and Retention of Information by Intermediaries providing Digital Locker facilities) Rules, 2016, documents issued through DigiLocker are deemed to be at par with original physical documents. Although DigiLocker can be used to store and access identity documents like Aadhaar cards, driving licenses, and educational certificates, it is not mandatory to have a DigiLocker account for passport processing.

Source: <u>The Hindu</u>

13. Correct Answer is (A)

- Statements 1 and 2 are correct. The Act's primary objective is to encourage and simplify mediation, with a focus on institutional mediation, for resolving various disputes. The Act covers international mediation that takes place in India, and the settlement agreement is enforceable in India.
- Statement 3 is incorrect. The Act established the 'Mediation Council of India' for the registration of mediators, mediation service providers, and mediation institutions, and to regulate and promote mediation in India. The Arbitration Council of India is a separate body under the Arbitration and Conciliation Act, 1996, which focuses on arbitration rather than mediation.

Source: <u>The Hindu</u>

14. Correct Answer is (B)

- Statements 1 and 2 are correct. The Smart Cities Mission is designed to promote the development of sustainable and citizen-friendly urban environments by enhancing urban life through improved infrastructure, efficient public transport, and the incorporation of smart solutions. The SCM involves financial and technical support from the central government to the cities selected through a competitive process.
- Statement 3 is incorrect. The Smart Cities Mission primarily focuses on enhancing urban infrastructure, governance, and sustainability through the use of technology and innovation. It does not impose stricter regulations on industrial activities within city limits. The mission's focus is more on developing efficient and sustainable urban spaces rather than regulating industrial activities.

Source: <u>The Hindu</u>

15. Correct Answer is (B)

• The '75/25' initiative, also known as the India Hypertension Control Initiative (IHCI) or the India Diabetes Control Initiative (IDCI), is a program launched by the Government of India in collaboration with the World Health Organization (WHO) and other partners. Its goal is to screen and provide standard care to 75 million individuals suffering from hypertension and diabetes by 2025.

Source: <u>The Hindu</u>

16. Correct Answer is (B)

- Statements 1 and 2 are correct. ONDC aims to promote open networks for all aspects of the exchange of goods and services over digital or electronic networks. ONDC uses Open-Sourced Methodology as well as Blockchain Technology. ONDC leverages blockchain technology to enhance the security and transparency of transactions.
- Statements 3 and 4 are incorrect. ONDC is a private non-profit Section 8 company, not a government-owned corporation. Real Estate is not currently a focus area under ONDC's operations, which are primarily focused on retail, restaurants, and other categories like travel and mobility.

Source: The Times of India



17. Correct Answer is (B)

- Statements 1 and 3 are correct. The scheme has been expanded to include all pregnant girl victims under Sections 4 and 6 of the POCSO Act. The Child Welfare Committee informs the girl child about the process of surrender as per Section 35 of the Juvenile Justice (Care and Protection of Children) Act, 2015.
- Statement 2 is incorrect. It is not mandatory for the girl child victim to have a copy of the FIR to avail the benefits under the scheme.

Source: Forum IAS

18. Correct Answer is (B)

• The Samrakshan Programme, also known as the India Newborn Action Plan (INAP), is aimed at reducing neonatal and infant mortality rates by improving the quality of care provided to newborns and their mothers. It focuses on strengthening healthcare systems, promoting the uptake of evidence-based interventions, and fostering collaboration among stakeholders to enhance overall birth outcomes.

Source: <u>The Hindu</u>

19. Correct Answer is (A)

- Statements 1 and 2 are correct. The Agnipath scheme is designed to recruit young individuals for a short-term service period in the armed forces, specifically for four years.
- Statement 3 is incorrect. Agniveers are not provided with a pension under the Agnipath scheme. Instead, they receive a lump sum amount called the Seva Nidhi package at the end of their four-year service.

Source: <u>The Hindu</u>

20. Correct Answer is (A)

- Statements 1 and 2 are correct. The PM-JANMAN scheme is specifically designed to uplift the socioeconomic status of Particularly Vulnerable Tribal Groups (PVTGs) by providing essential amenities and improving their living conditions. Having a job card is mandatory for PM JANMAN Housing registration.
- Statement 3 is incorrect. While the scheme aims to improve education access, free laptops for all students is not a core feature. Focus is likely on broader infrastructure and access. The PM-JANMAN scheme encompasses a wide range of interventions across various sectors, including: Housing, Drinking water, Sanitation, Education, Health, Livelihood, Connectivity, Legal awareness.

Source: The Hindu

21. Correct Answer is (C)

• Statements 1 and 2 are correct. The NMHP aims to ensure that women, girls, and persons who menstruate have access to safe, hygienic, and quality menstrual products. The policy focuses on promoting health, well-being, and empowerment by providing access to menstrual hygiene resources and addressing specific needs. Despite progress in menstrual hygiene management in general, the specific needs of women in prisons are often neglected. Reports indicate that women in Indian prisons face significant challenges in accessing sanitary products and maintaining menstrual hygiene due to inadequate facilities and inconsistent implementation of policies.

Source: <u>The Hindu</u>

22. Correct Answer is (A)

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• Statements 2 and 3 are incorrect. The program's components focus on manpower training, capacity building, service provision, and awareness generation, but not specifically on developing a network of hearing aid manufacturers. The program does not address the quality of life or include Indian Sign Language (ISL). The program focuses on training healthcare professionals at various levels, including ENT specialists, audiologists, and grassroots workers.

Source: <u>The Hindu</u>

23. Correct Answer is (C)

- Statements 1 and 3 are correct. PM-JAY provides health insurance coverage to over 50 crore (500 million) Indian citizens, making it the world's largest government-sponsored healthcare program. India has developed several digital public goods, such as Aadhaar, Unified Payments Interface (UPI), and CoWIN, which have been recognized globally for their impact and scalability.
- Statement 2 is incorrect. The Ayushman Bharat initiative was launched to achieve Universal Health Coverage (UHC) and improve healthcare access.

Source: AIR

24. Correct Answer is (A)

- Statements 1 and 2 are correct. One of the primary objectives of the AMRUT scheme is to ensure that every household has access to a tap with assured water supply and a sewerage connection. The Ministry of Housing and Urban Affairs is responsible for the implementation of the AMRUT scheme.
- Statement 3 is incorrect. AMRUT 2.0 focuses on making cities more sustainable and improving urban infrastructure, its primary goals include universal coverage of water supply through functional taps to all households, recycling/reuse of treated sewage, rejuvenation of water bodies, and water conservation. The specific focus on making cities pollution-free and planting trees is not the main objective of AMRUT 2.0.

Source: <u>The Hindu</u>

Index & Reports

Q.1) With reference to the World Press Freedom Index-2024, which of the following statement(s) is/are correct?

- 1. The index in published by Reporters Without Borders (RSF).
- 2. The ranking of India in the index has dropped compared to the previous year.
- 3. Norway and Denmark topped the RSF index.

Select the correct answer using the codes given below:

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

Q.2) Consider the following statements with reference to the recently released World Press Freedom Index-2024:

- 1. Among the BRICS countries, China and Russia have greater press freedom, while Brazil and South Africa are ranked lower.
- 2. Among the South Asian countries, India is India is ranked lower than all other countries, except Bangladesh.

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.3) With respect to the Travel & Tourism Development Index 2024, which of the following statement(s) is/are correct?

- 1. India ranks the highest in South Asia among the lower-middle-income economies in the index.
- 2. The index is published annually by the Organisation for Economic Co-operation and Development (OECD).

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

Answer Key

1 – (b)	2 – (b)	3 – (a)
1 - (D)	2 - (0)	5 - (a)

Answers & Explanations

- 1. Correct Answer is (B)
- Statements 1 and 3 are correct. Reporters Without Borders (RSF) is the organization that publishes the World Press Freedom Index annually. Norway and Denmark topped the RSF index, while Eritrea ranked at the bottom, with Syria just above it.
- Statement 2 is incorrect. India's rank improved slightly from 161 in 2023 to 159 in 2024. This was primarily due to other countries slipping in their rankings. However, India's score in the World Press Freedom Index fell from 36.62 to 31.28.

Source: The Hindu

2. Correct Answer is (B)

- Statement 1 is incorrect. According to the World Press Freedom Index 2024, Brazil and South Africa have higher press freedom rankings than China and Russia among the BRICS nations.
- Statement 2 is correct. Among South Asian countries, India is ranked lower than all other countries except Bangladesh.

Source: The Hindu

3. Correct Answer is (A)

- Statement 1 is correct. India ranks the highest in South Asia among lower-middle-income economies in the Travel & Tourism Development Index 2024. The report highlights India's improvement in various aspects of the travel and tourism sector. India has climbed to the 39th position in the Index.
- Statement 2 is incorrect. The Travel & Tourism Development Index is a biennial report published by the World Economic Forum.

Source: AIR



International Relations/Organizations

Q.1) Which one of the following is a key component of the "AUKUS agreement"?

- a) Development of a joint space exploration program
- b) Provision of nuclear-powered submarines to Australia
- c) Establishment of a free travel zone between the three countries
- d) Creation of a unified currency

Q.2) Consider the following statements:

Statement-I: Despite its global rise, India's influence in South Asia has declined.

Statement-II: The majority of the South Asian nations are now subject to more sanctions from the US.

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.3) Which one of the following best describes the nature of Blue Corner Notice issued by the Interpol?

- a) Member countries are obligated to arrest the individual once a Blue Corner Notice is issued.
- b) Interpol can directly arrest individuals identified in a Blue Corner Notice.
- c) The issuance of a Blue Corner Notice allows for the immediate extradition of the individual.
- d) Interpol's notices, including Blue Corner Notices, are discretionary, and member countries cannot be compelled to act upon them.

Q.4) Consider the following statements:

- 1. The number of phishing attacks has increased significantly due to advances in artificial intelligence (AI).
- 2. Prioritizing the use of AI in military and defense applications is the main objective of the 'Bletchley Declaration' in terms of AI development and implementation.

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.5) Consider the following statements regarding the International Criminal Police Organization (Interpol):

- 1. The Interpol is an inter-governmental law enforcement organisation which assists and facilitates cooperation between national law forces in member countries to combat transnational crimes.
- 2. The agency has a National Central Bureau in all member countries.
- 3. Member countries are bound by international law to abide by Interpol notices.
- 4. The National Investigation Agency (NIA) is officially designated as the nodal agency for India.

How many of the statements given above are correct?

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



Q.6) The 'Camp David Accords' were a peace agreement signed between:

- a) Israel and Lebanon
- b) Israel and Egypt
- c) Israel and Jordan
- d) Israel and Syria

Q.7) In the Asia Pacific region, which one of the following organisations is focused on economic growth, cooperation, trade and investment?

- a) Association of Southeast Asian Nations (ASEAN)
- b) Asia-Pacific Economic Cooperation (APEC)
- c) North Atlantic Treaty Organization (NATO)
- d) European Union (EU)

Q.8) The decision to accept a new member state in the United Nations (UN) ultimately lies with:

- a) The Security Council.
- b) The Secretary-General.
- c) The General Assembly by a two-thirds majority vote.
- d) A unanimous vote of all existing member states.

Q.9) Consider the following statements:

- 1. Only 0.3% of freshwater is in liquid form on the surface.
- 2. The area beyond Exclusive Economic Zone (EEZ) is referred to as the common heritage of mankind by the United Nations Law of the Sea Convention (UNCLOS).
- 3. The Geneva Conferences on the Law of the Sea established guidelines for the treatment of prisoners of war at sea.

How many of the statements given above are correct?

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

Q.10) Consider the following statements:

Statement-I: India's Free Trade Agreements (FTAs) has witnessed a shift in the recent Trade and Economic Partnership Agreement with the European Free Trade Association (EFTA).

Statement-II: India has focused on prioritizing trade negotiations over investment negotiations in recent FTAs.

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.11) Consider the following statements:

- 1. The United Nations Office against Terrorism (UNOCT) acts as a central unit in global counterterrorism operations.
- 2. The purpose of the United Nations Counter-Terrorism Fund (UNCTF) is to support the implementation of the United Nations Global Counter-Terrorism Strategy and to allocate funds to projects and initiatives aimed at countering terrorism.

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.12) With reference to the Global Alliance of National Human Rights Institutions (GANHRI), consider the following statements:

- 1. It is responsible for providing financial assistance to countries struggling with human rights issues.
- 2. It serves as an advisory body to the United Nations.
- 3. The Paris Principles, used by GANHRI for accreditation, emphasize Independence and pluralism within NHRIs.

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

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

Q.13) China-Myanmar module, seen in the news recently, is used in the context of:

- a) Economic initiative between China and Myanmar
- b) Joint military exercise conducted by China and Myanmar
- c) Environmental conservation initiative between China and Myanmar
- d) Militant activities in Manipur

Q.14) Consider the following:

- 1. Mandate and Competence
- 2. Autonomy from Government
- 3. Transparency in Appointment
- 4. Fraternity in the Society
- 5. Adequate Resources
- 6. Pluralism

According to the Paris Principles, how many of the above criteria should be met by the National Human Rights Institutions (NHRIs) for accreditation?

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

Q.15) With reference to the International North-South Transport Corridor (INSTC), which of the following statement(s) is/are correct?

- 1. Kazakhstan is not a member country of INSTC.
- 2. Mumbai port serves as a significant entry point for the INSTC in India.
- 3. Air transportation modes are integrated into the INSTC.

Select the correct answer using the codes given below:

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



Q.16) Consider the following statements with reference to India-Middle East-Europe Economic Corridor (IMEC):

- 1. It aims to create a comprehensive network connecting Central Asia, Russia, and Eastern Europe.
- 2. In order to promote clean energy, it aims to set up solar power plants across the corridor.
- 3. It will improve trade efficiency between India and Europe by providing alternative to the Suez Canal route.

How many of the statements given above are correct?

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

Q.17) Consider the following statements:

- 1. The compliance with Financial Action Task Force (FATF) recommendations is mandatory.
- 2. White Notice is issued by the Interpol to provide information on modus operandi, objects, devices, or concealment methods used by criminals.
- 3. United Nations Office on Drugs and Crime (UNODC) works in close collaboration with the International Court of Justice.

How many of the statements given above are correct?

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

Q.18) In the context of International Relations, Generalized System of Preferences (GSP) refers to:

- a) A bilateral agreement between two developing countries to reduce tariffs on all trade goods.
- b) A global initiative led by the United Nations to enforce environmental standards through trade sanctions.
- c) A reciprocal trade agreement where developing countries offer tariff reductions to developed countries in exchange for aid.
- d) A preferential tariff system extended by developed countries to developing countries to promote economic growth through trade.

Q.19) Consider the following statements:

- 1. India spends twice of what China spends on food, transport, communication, and clothing and footwear.
- 2. China's birth rate and total fertility rate have declined.
- 3. India's Private Final Consumption Expenditure (PFCE) contributes more than China's.

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

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

Q.20) Which one of the following has launched the world's first comprehensive legal framework for regulating artificial intelligence (AI)?

- a) European Union (EU)
- b) Association of Southeast Asian Nations (ASEAN)
- c) Gulf Cooperation Council (GCC)
- d) South Asian Association for Regional Cooperation (SAARC)



Q.21) 'Oslo Peace Accords' aimed to:

- a) Establish a Palestinian state
- b) Facilitate Palestinian self-governance in parts of the West Bank and Gaza Strip
- c) Resolve the issue of Israeli settlements
- d) Determine the final status of Jerusalem

Q.22) Consider the following statements:

- 1. The International Solar Alliance (ISA) focuses on promoting solar energy in developing countries with high energy demands.
- 2. 'Towards 1000' strategy of ISA is aimed at installing 1000 solar panels across member countries.
- 3. Solar Technology Application Resource Centre (STAR C) Initiative is a key initiative by ISA to promote solar energy in agriculture.

How many of the statements given above are correct?

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

Q.23) An arrest warrant issued by the International Criminal Court (ICC) for a national leader:

- a) Automatically triggers military intervention by member states.
- b) Guarantees a successful trial and conviction at the ICC.
- c) Places an obligation on member states to arrest and surrender the individual.
- d) Automatically imposes economic sanctions on the individual's country.

Q.24) Consider the following statements:

- 1. The World Health Assembly (WHA) is the decision-making body of the United Nations Children's Fund (UNICEF).
- 2. International Health Regulations (IHR) are the legally binding regulations adopted by the WHA.

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

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

Q.25) Consider the following statements:

- 1. The Central Bureau of Investigation (CBI) acts as the interface with Interpol in India.
- 2. Interpol notices share critical, crime-related information between member countries, seeking international cooperation for tracing or apprehending fugitives in any part of the world.
- 3. Red Corner Notice (RCN) by Interpol is issued to seek the location and arrest of a person wanted for prosecution or to serve a sentence.

How many of the statements given above are correct?

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

Q.26) Which one of the following countries is NOT a member of the China-CEE (Central and Eastern European) Cooperation mechanism?

- a) Poland
- b) Hungary
- c) Greece
- d) France



Q.27) 'Nairobi-Washington Vision', seen in the news recently, is:

- a) A new trade agreement between the United States and Kenya to boost bilateral trade in agricultural products.
- b) A joint military exercise between the United States and Kenya to enhance defense cooperation.
- c) A collaborative effort to provide debt relief and sustainable development support for developing countries.
- d) An initiative to transform Nairobi into a global technology hub by 2030, focusing on advancements in artificial intelligence and robotics.

Q.28) Consider the following statements:

- 1. India has not signed the Nuclear Non-Proliferation Treaty (NPT) but it is a signatory to the Comprehensive Test Ban Treaty (CTBT).
- 2. India has obtained an India-Specific Safeguards Agreement from the International Atomic Energy Agency (IAEA), giving India to place its civilian nuclear facilities under IAEA safeguards.

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.29) Consider the following statements:

- 1. The International Criminal Court (ICC) addresses serious international crimes committed by nations or group of nations.
- 2. Israel is a state party to the Rome Statute.
- 3. Unlike the ICC, the International Court of Justice (ICJ) addresses individual criminal accountability.

How many of the statements given above are correct?

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

Q.30) With reference to the Europe's AI Convention, consider the following statements:

- 1. It aims to create new substantive human rights specific to AI.
- 2. It is a legally binding treaty.
- 3. The convention establishes a central authority to control all AI applications.

How many of the statements given above are correct?

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

Q.31) Consider the following statements:

- 1. Shahid Kalantari and Bandar Abbas ports make up the Chabahar Port.
- 2. Chabahar Port connects India to the Mediterranean Sea.
- 3. Chabahar Port enables India to control the Strait of Hormuz.
- 4. Sanctions imposed on Iran by the United States is the challenge faced by India in the development of Chabahar Port.

How many of the statements given above are correct?

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



Q.32) Consider the following statements:

Statement-I: India has a trade surplus with China.

Statement-II: India mainly imports electronics and electrical items from China.

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.33) With reference to the United Nations Military Gender Advocate of the Year Award, consider the following statements:

- 1. The award aims to honour a military peacekeeper who has best integrated a gender perspective into peacekeeping activities.
- 2. Major Radhika Sen, a 2023 recipient of the award, is recognized for her work in negotiating the release of hostages held by rebel groups.

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

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

Q.34) Consider the following statements:

- 1. The UN requires that membership seeking nations be "peace-loving" states capable and willing to carry out the obligations of the UN Charter.
- 2. Membership applications to the UN need a recommendation from the United Nations Security Council (UNSC) without any P5 member casting a veto.
- 3. The country looking for the UN membership must possess a well-organized army.

Which of the statements given above are correct?

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

Q.35) Consider the following statements regarding the 'Lahore Declaration of 1999':

- 1. The Lahore Declaration of 1999 mainly focused on normalizing trade relations between India and Pakistan.
- 2. The Lahore Declaration was made as a response of the Kargil War of 1999.
- 3. According to the Lahore Declaration, India and Pakistan agreed to intensify their dialogue process to achieve an early and positive outcome on the agreed bilateral agenda.

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

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

Q.36) 'Colombo Process', seen in the news recently, is related to:

- a) Climate Change Negotiations
- b) International Trade Agreements
- c) Labor Migration
- d) Nuclear Non-Proliferation



Q.37) With reference to the North Atlantic Treaty Organization (NATO), consider the following statements:

- 1. The principle behind NATO's collective defense strategy is that each member state contributes military forces based on its economic strength.
- 2. Decisions taken under NATO require a unanimous vote of approval from all member states.

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 – (d)	4 - (a)	5 – (b)	6 - (b)	7 – (b)	8 - (c)	9 - (b)	10 - (c)
11 - (c)	12 – (c)	13 - (d)	14 – (b)	15 – (a)	16 – (a)	17 - (d)	18 - (d)	19 - (d)	20 – (a)
21 - (b)	22 – (b)	23 - (c)	24 - (b)	25 – (c)	26 - (d)	27 – (c)	28 - (b)	29 - (d)	30 - (a)
31 – (a)	32 - (d)	33 - (a)	34 - (a)	35 – (c)	36 - (c)	37 - (d)			

Answers & Explanations

1. Correct Answer is (B)

• AUKUS (Australia, the United Kingdom, and the United States) is a trilateral security partnership announced in 2021. The agreement aims to enhance security and defense cooperation among the three nations, with a focus on the Indo-Pacific region. A significant aspect of the agreement is the provision of nuclear-powered submarines to Australia, which would help strengthen its naval capabilities. The partnership also includes collaboration in other areas like cyber capabilities, artificial intelligence, quantum technologies, and undersea capabilities.

Source: <u>The Hindu</u>

2. Correct Answer is (C)

- Statement I is correct. India's influence in South Asia has faced challenges in recent years due to various factors, such as increasing Chinese involvement in the region, internal political issues within India, and the growing assertion of smaller South Asian countries.
- Statement II is incorrect. The majority of South Asian nations are not subject to more sanctions from the United States. As of now, only Iran and North Korea are under extensive sanctions from the US among the countries that can be considered part of the broader South Asia and neighboring regions.

Source: <u>The Hindu</u>

3. Correct Answer is (D)

A Blue Corner Notice is issued by Interpol to collect additional information about a person's identity, location, or activities in relation to a crime. It is a request for cooperation and assistance from member countries in sharing relevant information about the person of interest. However, the Created with love • by ForumIAS- the knowledge network for civil services.

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notices themselves are not international arrest warrants, and Interpol cannot arrest individuals directly. Furthermore, member countries are not obligated to act upon these notices, as they are considered discretionary. Each country has its own laws and procedures to determine whether or not to arrest an individual based on the information provided in the notice.

Source: <u>The Hindu</u>

4. Correct Answer is (A)

- Statement 1 is correct. There has been a significant increase in phishing attacks due to the advances in artificial intelligence (AI). Reports highlight how AI, particularly generative AI, has been utilized to enhance the sophistication and effectiveness of phishing campaigns, leading to notable rises in such attacks.
- Statement 2 is incorrect. The Bletchley Declaration aims to establish a global framework for the ethical use of artificial intelligence (AI), focusing on the safe, human-centric, trustworthy, and responsible development and deployment of AI systems. While AI has potential applications in various sectors, including defense and military, prioritizing its use specifically in these areas is not the main objective of the Bletchley Declaration.

Source: <u>The Hindu</u>

5. Correct Answer is (B)

- Statements 1 and 2 are correct. Interpol is an international organization that facilitates cooperation between the police forces of member countries to combat international crime. Each member country of Interpol maintains a National Central Bureau (NCB), which acts as the liaison between the country's law enforcement and Interpol's General Secretariat, as well as other member countries. The agency uses a 'colour-coded' system to alert and share requests for crime-related information among member countries and global organisations.
- Statements 3 and 4 are incorrect. While Interpol notices are significant and member countries are encouraged to cooperate, they are not legally binding. Member countries may choose how to respond to these notices based on their national laws and the legal value they assign to such notices. The Central Bureau of Investigation (CBI) is the nodal agency for Interpol in India.

Source: <u>The Hindu</u>

6. Correct Answer is (B)

• The Camp David Accords were a pair of political agreements signed on September 17, 1978 by Egyptian President Anwar Sadat and Israeli Prime Minister Menachem Begin, following 12 days of secret negotiations facilitated by U.S. President Jimmy Carter at Camp David. The two key agreements were: a) A Framework for Peace in the Middle East, and b) A Framework for the Conclusion of a Peace Treaty between Egypt and Israel.

Source: <u>NewsonAIR</u>

7. Correct Answer is (B)

• APEC is a regional economic forum comprising 21 member economies, including countries from North America, South America, Asia, and Oceania. The primary goal of APEC is to support sustainable economic growth and prosperity in the Asia-Pacific region by promoting free trade, investment, and cooperation among its members.

Source: <u>The Times of India</u>

8. Correct Answer is (C)

• The decision to accept a new member state into the United Nations is ultimately made by the General Assembly, based on a recommendation from the Security Council. The General Assembly decides upon the application for membership by a two-thirds majority of the members present and voting.

Source: The Times of India



9. Correct Answer is (B)

- Statements 1 and 2 are correct. Statistics show that the total volume of water on earth is estimated at 1.386 billion km3, where 97.5% is salt water and 2.5% freshwater. Out of this freshwater, only 0.3% is in liquid form on the surface, which means that the rest of the freshwater is underground, including on or under the ocean bed. The United Nations Convention on the Law of the Sea (UNCLOS) refers to the area beyond the Exclusive Economic Zones (EEZs) of coastal states as the "Area" and designates it as the "common heritage of mankind." This principle implies that the resources in this area belong to all of humanity and should be managed for the benefit of all nations.
- Statement 3 is incorrect. The Geneva Conventions on the Law of the Sea, held in 1958, did not specifically establish guidelines for the treatment of prisoners of war at sea. The Geneva Conventions on the Law of the Sea focused on issues such as fishing rights, navigation, and territorial waters.

Source: <u>The Hindu</u>

10. Correct Answer is (C)

- Statement I is correct. The recent FTA with EFTA marks a significant shift as it includes a detailed investment chapter, which is a departure from some of India's other recent FTAs that have not included such comprehensive investment provisions.
- Statement-II is incorrect because India has not prioritized trade negotiations over investment negotiations in recent FTAs. Instead, it has focused on decoupling or separation of the two aspects. India's approach is to have separate agreements on trade and investment with the same country, as seen in the case of the UAE, where India signed an FTA in 2022 and a separate bilateral investment treaty earlier this year. This indicates a parallel treatment of trade and investment negotiations, rather than prioritizing one over the other.

Source: <u>The Hindu</u>

11. Correct Answer is (C)

• Statements 1 and 2 are correct. The United Nations Office against Terrorism (UNOCT) plays a central role in coordinating and implementing the United Nations' global counter-terrorism efforts. It provides assistance to Member States in their efforts to combat terrorism through capacity-building, technical support, and other measures. The UNCTF was established to support the implementation of the United Nations Global Counter-Terrorism Strategy. It relies on voluntary contributions to finance counter-terrorism activities and capacity-building projects aimed at countering terrorism globally.

Source: Forum IAS

12. Correct Answer is (C)

- Statement 1 is incorrect. GANHRI does not provide financial assistance to countries. Its primary role is to strengthen and support National Human Rights Institutions (NHRIs) through accreditation, capacity building, and facilitating their engagement with international human rights systems. GANHRI's activities include organizing international conferences, supporting NHRIs in danger, and assisting governments in establishing NHRIs, but it does not involve direct financial assistance to countries.
- Statements 2 and 3 are correct. GANHRI serves as an advisory body to the United Nations, particularly through its cooperation with the UN Human Rights Council and other UN mechanisms. It facilitates the relationship of NHRIs with the UN, supports their engagement in international human rights mechanisms, and provides a platform for NHRIs to share best practices and challenges. The Paris Principles set the standards for the independence and pluralism of NHRIs. These principles require NHRIs to have a mandate to promote and protect human rights, operate independently from the government, and ensure pluralistic representation of society in their



membership. GANHRI uses these principles to accredit NHRIs, assessing them based on their adherence to these criteria.

Source: <u>The Hindu</u>

13. Correct Answer is (D)

• The term "China-Myanmar module" has been recently used in the context of militant activities in the Indian state of Manipur. According to reports, the National Investigation Agency (NIA) of India has stated that the China-Myanmar module of the National Socialist Council of Nagaland (NSCN-IM) has been supporting banned terrorist organizations in Manipur to destabilize the region through violence and illegal arms supply. This module operates from Myanmar and allegedly receives support from China.

Source: <u>The Hindu</u>

14. Correct Answer is (B)

• The Paris Principles are a set of international standards which guide the establishment and operation of National Human Rights Institutions (NHRIs). These principles were adopted by the United Nations General Assembly in 1993 and are formally known as the "Principles Relating to the Status of National Institutions". The Paris Principles set out six main criterions that NHRIs are expected to meet. These are: Mandate and competence, Autonomy from Government, Independence guaranteed by a Statute or Constitution, Pluralism, Adequate Resources; and adequate powers of investigations.

Source: <u>The Hindu</u>

15. Correct Answer is (A)

- Statements 1 and 3 are incorrect. Kazakhstan is a member country of INSTC. The INSTC primarily involves multi-modal transportation including ship, rail, and road, but not air transportation.
- Statement 2 is correct. Mumbai is a crucial entry point for the INSTC route in India.

Source: The Hindu

16. Correct Answer is (A)

- Statements 1 and 2 are incorrect. The IMEC corridor focuses on connecting South Asia, the Middle East, and Europe. The IMEC aims to promote clean energy primarily through the establishment of pipelines for clean hydrogen export.
- Statement 3 is correct. One of the key objectives of the IMEC is to improve trade efficiency between India and Europe by offering a faster alternative to the Suez Canal route.

Source: AIR

17. Correct Answer is (D)

• Statements 1, 2 and 3 are incorrect. While FATF membership is voluntary and compliance with its recommendations is strongly encouraged, it is not legally mandatory. Non-compliance can lead to significant consequences, such as being placed on the FATF greylist or blacklist, which can impact a country's international financial relations, but it is not legally enforced. Purple Notice is issued by the Interpol to provide information on modus operandi, objects, devices, or concealment methods used by criminals. The UNODC primarily focuses on issues related to drugs, crime, and terrorism, and while it collaborates with various international bodies, it does not specifically work in close collaboration with the International Court of Justice (ICJ). The ICJ deals with legal disputes between states and advisory opinions on international legal issues, which is different from the mandate of the UNODC.

Source: The Hindu

18. Correct Answer is (D)



• The Generalized System of Preferences (GSP) is a trade arrangement where developed countries offer preferential tariff treatment to exports from developing countries. It aims to promote economic growth in developing countries by providing them with better access to markets in developed countries through reduced or zero tariffs on selected goods.

Source: <u>The Hindu</u>

19. Correct Answer is (D)

- Statement 1 is incorrect. India spends around half of what China spends on food, transport, communication, and clothing and footwear.
- Statements 2 and 3 are correct. China's birth rate and total fertility rate have been declining, with the total fertility rate dropping below the replacement level of 2.1 children per woman. India's PFCE contributes over 58% to its GDP, while China's PFCE contributes only around 38% to its GDP.

Source: <u>The Hindu</u>

20. Correct Answer is (A)

• The European Union has launched the world's first comprehensive legal framework for regulating artificial intelligence (AI), known as the Artificial Intelligence Act (AI Act). The AI Act aims to ensure that AI systems are safe, transparent, and respect fundamental rights, while fostering innovation and maintaining the EU's competitive edge in the global AI landscape.

Source: AIR

21. Correct Answer is (B)

• The Oslo Accords, signed between the Palestine Liberation Organization (PLO) and the Government of Israel in 1993, aimed to establish a framework for peace and reconciliation between the two parties. The agreement focused on granting the Palestinians limited self-rule in specific areas of the West Bank and Gaza Strip through the creation of the Palestinian Authority.

Source: <u>The Hindu</u>

22. Correct Answer is (B)

- Statements 1 and 3 are correct. The International Solar Alliance (ISA) is focused on promoting solar energy among its member countries, many of which are developing countries with high energy demands. The ISA aims to mobilize efforts against climate change through the deployment of solar energy solutions, particularly in countries that are rich in solar resources but face significant energy demands and challenges in energy access. The Solar Technology Application Resource Centre (STAR C) Initiative is a key initiative by the ISA, aimed at enhancing quality infrastructure (QI) for the uptake of solar energy product and service markets, particularly in least developed countries (LDCs) and small island developing states (SIDS). Recently, Spain has become the 99th member of the International Solar Alliance.
- Statement 2 is incorrect. 'Towards 1000' strategy of the ISA is aimed at mobilizing USD 1,000 billion of investments in solar energy solutions by 2030, delivering energy access to 1,000 million people using clean energy solutions, and resulting in the installation of 1,000 GW of solar energy capacity.

Source: AIR

23. Correct Answer is (C)

• When the ICC issues an arrest warrant for a national leader, the Rome Statute, which established the ICC, imposes an obligation on member states to cooperate with the court and arrest the accused individual for the purpose of surrendering them to the ICC. This does not mean that military intervention will automatically occur or that the trial will necessarily result in a conviction. Furthermore, economic sanctions are not directly linked to ICC arrest warrants; they may be imposed by individual countries or international organizations in response to various situations.

Source: <u>The Hindu</u>



24. Correct Answer is (B)

- Statement 1 is incorrect. The World Health Assembly (WHA) is the decision-making body of the World Health Organization (WHO). It is the forum through which the World Health Organization (WHO) is governed by its 194 member states. It is the world's highest health policy setting body and is composed of health ministers from member states.
- Statement 2 is correct. The International Health Regulations (IHR) are legally binding regulations adopted by the World Health Assembly (WHA) to prevent, protect against, control, and provide a public health response to the international spread of disease.

Source: <u>The Hindu</u>

25. Correct Answer is (C)

• Statements 1, 2 and 3 are correct. The Central Bureau of Investigation (CBI) is officially designated as the National Central Bureau (NCB) of India, which acts as the interface with Interpol. Interpol notices are international requests for cooperation or alerts that allow police in member countries to share critical crime-related information, seeking international cooperation for tracing or apprehending fugitives. A Red Corner Notice (RCN) is issued by the Interpol to seek the location and arrest of a person wanted for prosecution or to serve a sentence.

Source: <u>The Hindu</u>

26. Correct Answer is (D)

• The China-CEEC Cooperation mechanism, also known as the "17+1" mechanism, was launched in 2012 to promote economic and trade cooperation between China and 16 Central and Eastern European countries. The participating countries are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, and Slovenia.

Source: <u>The Hindu</u>

27. Correct Answer is (C)

• The Nairobi-Washington Vision was launched in 2022 during the US-Africa Leaders' Summit in Washington, D.C. It is a joint initiative by the US and Kenyan governments, in coordination with other G7 countries and African nations, to address the issues of debt relief, sustainable development financing, and economic recovery in developing countries. The initiative aims to position the U.S. as a better partner for Africa compared to China, which has been providing high-interest loans to the continent.

Source: <u>The Hindu</u>

28. Correct Answer is (B)

- Statement 1 is incorrect. India has not signed the Nuclear Non-Proliferation Treaty (NPT) and is also not a signatory to the Comprehensive Test Ban Treaty (CTBT).
- Statement 2 is correct. India has obtained an India-Specific Safeguards Agreement from the International Atomic Energy Agency (IAEA), which allows India to place its civilian nuclear facilities under IAEA safeguards.

Source: <u>The Hindu</u>

29. Correct Answer is (D)

• Statements 1. 2 and 3 are incorrect. The ICC addresses grave international crimes such as genocide, crimes against humanity, war crimes, and the crime of aggression, but it prosecutes individuals, not nations or groups of nations. Israel is not a state party to the Rome Statute. Israel signed the Rome Statute but later withdrew its signature and has not ratified the treaty. The ICJ addresses legal disputes between states and provides advisory opinions on international legal issues, whereas the ICC prosecutes individuals for international crimes.



Source: <u>The Hindu</u>

30. Correct Answer is (A)

- Statements 1 and 3 are incorrect. Europe's AI Convention does not create new substantive human rights specific to AI. Instead, it ensures that existing human and fundamental rights, which are protected by international and national laws, remain protected during the application of AI systems. The AI Convention does not establish a central authority to control all AI applications. Instead, it requires each party to adopt or maintain measures to ensure that AI activities are consistent with human rights, democracy, and the rule of law, and to establish independent oversight mechanisms within their own jurisdictions.
- Statement 2 is correct. The AI Convention is the first-ever international legally binding treaty aimed at ensuring the respect of human rights, the rule of law, and democracy in the use of AI systems.

Source: <u>The Hindu</u>

31. Correct Answer is (A)

- Statements 1, 2 and 3 are incorrect. The Chabahar Port comprises two main ports: Shahid Kalantari and Shahid Beheshti. Chabahar Port does not connect India directly to the Mediterranean Sea. It provides access to Afghanistan and Central Asia and is part of the International North-South Transport Corridor (INSTC), which connects India to Russia via Iran, but not directly to the Mediterranean Sea. While Chabahar Port is strategically located near the Strait of Hormuz, it does not enable India to control the Strait. The port provides India with a strategic foothold in the region but does not confer control over the Strait of Hormuz.
- Statement 4 is correct. One of the significant challenges faced by India in the development of Chabahar Port is the sanctions imposed on Iran by the United States, which have affected the progress and investment in the port.

Source: <u>The Hindu</u>

32. Correct Answer is (D)

- Statement-I is incorrect. India has a significant trade deficit with China, which has been widening rapidly. In FY24, the trade deficit with China reached \$85.1 billion, the highest ever recorded.
- Statement-II is correct. A majority of India's imports from China are electronics and electrical items. From FY15 to FY24, India imported \$75 billion worth of mobiles/telephones, \$37 billion of automatic data processing units, \$28 billion of semiconductor devices and diodes, and \$27 billion of electronic integrated circuits. India heavily relies on China for these imports.

Source: The Hindu

33. Correct Answer is (A)

- Statement 1 is correct. The United Nations Military Gender Advocate of the Year Award was created in 2016 by the Office of Military Affairs within the Department for Peace Operations (DPO). It recognizes a military peacekeeper who has best integrated a gender perspective into peacekeeping activities. This aligns with the principles of UN Security Council Resolution 1325 on Women, Peace, and Security.
- Statement 2 is incorrect. Major Radhika Sen, the 2023 recipient of the award, is recognized for her advocacy for women and girls while serving as a peacekeeper with the United Nations Organisation Stabilisation Mission in the Democratic Republic of the Congo (MONUSCO). Her notable contributions include leading mixed-gender engagement patrols, creating Community Alert Networks, and fostering safe spaces for men and women to operate together. Sen is the second Indian peacekeeper to receive this honour, following Major Suman Gawani, who was awarded in 2019 for her service with the UN Mission in South Sudan.

Source: AIR



34. Correct Answer is (A)

- Statements 1 and 2 are correct. According to Article 4 of the UN Charter, membership in the United Nations is open to all peace-loving states that accept the obligations contained in the Charter and, in the judgment of the Organization, are able and willing to carry out these obligations. For a state to be admitted to the UN, it must first be recommended by the Security Council. This recommendation requires affirmative votes from at least nine of the fifteen members of the Security Council, with none of the five permanent members (P5) casting a veto.
- Statement 3 is incorrect. There is no requirement in the UN Charter that a country must possess a well-organized army to become a member of the United Nations. The primary criteria are that the state must be peace-loving, accept the obligations of the UN Charter, and be able and willing to carry out these obligations.

Source: <u>The Hindu</u>

35. Correct Answer is (C)

- Statements 1 and 2 are incorrect. The Lahore Declaration primarily focused on establishing a framework for peaceful relations, addressing security concerns, and resolving outstanding issues, including Jammu and Kashmir, through dialogue. While it did mention cooperation in various fields, the primary focus was not specifically on normalizing trade relations. Lahore Declaration was signed on February 21, 1999, before the Kargil War, which began in May 1999. The declaration aimed to promote peace and stability between India and Pakistan following their nuclear tests in 1998. The Kargil War occurred later and was seen as a violation of the spirit of the Lahore Declaration.
- Statement 3 is correct. The Lahore Declaration included a commitment by both India and Pakistan to intensify their dialogue process to achieve an early and positive outcome on the agreed bilateral agenda. This was part of their broader effort to resolve all outstanding issues, including Jammu and Kashmir, and to promote peace and stability in the region.

Source: AIR

36. Correct Answer is (C)

• The Colombo Process is a regional consultative forum comprising 12 member states from South and Southeast Asia that are countries of origin for migrant workers. It was established in 2003 in Colombo, Sri Lanka. The founding members were Bangladesh, China, India, Indonesia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam. It provides a non-binding platform for member states to engage in dialogue and cooperation on labour migration issues of common interest. The International Organization for Migration (IOM) provides technical and administrative support as the Secretariat. Recently, India assumed the Chair of Colombo Process for 2024-26, for the first time since its inception.

Source: AIR

37. Correct Answer is (D)

Statements 1 and 2 are incorrect. The principle behind NATO's collective defense strategy is not based on each member state contributing military forces according to its economic strength. Instead, it is based on the principle of mutual defense, where an attack against one Ally is considered an attack against all Allies, as enshrined in Article 5 of the North Atlantic Treaty. Each member country decides over its own defense resources and military forces, and the collective defense is based on military forces from individual member countries being placed under NATO's command. NATO decisions are made by consensus, not by a unanimous vote. This means that there is no formal voting process; instead, decisions are reached through discussion and consultation until an agreement acceptable to all member states is achieved.

Source: AIR



Economy

Q.1) Consider the following funds:

- 1. Hedge Funds
- 2. Gold Funds
- 3. Equity Funds

How many of the above funds are managed by the Asset Management Companies (AMCs)?

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

Q.2) In economics, the term "economic pie" generally refers to:

- a) The proportion of national income allocated to each industry.
- b) The total amount of resources and wealth available in an economy.
- c) The number of economic policies a government can implement.
- d) The division of economic resources between government and private sector.

Q.3) Consider the following statements:

- 1. In 2023, India's share in global goods export rose more than its share in global services exports.
- 2. The growth in services exports in India have acted as a buffer against external shocks such as high oil prices.

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

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

Q.4) Consider the following statements:

Statement-I: India's steel exports to the European Union have increased significantly in FY24. **Statement-II:** Indian steel prices were lower compared to global prices.

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.5) Consider the following statements:

- 1. India is the world's largest importer of vegetable oils.
- 2. Singapore is the largest exporter of palm oil to India.

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

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

Q.6) The Reserve Bank of India (RBI) may choose to repurchase Government Securities (G-Secs) from the open market to:

- a) Increase liquidity and encourage lending in the economy
- b) Reduce inflation by tightening the money supply
- c) Increase the government's borrowing costs
- d) Reduce the level of government debt



Q.7) Which one of the following best defines a Standalone Primary Dealer (SPD) in the Indian government securities market?

- a) A financial institution that operates as part of a commercial bank and deals exclusively with government securities.
- b) A financial intermediary authorized by the Reserve Bank of India to buy and sell government securities without being part of a banking institution.
- c) A subsidiary of foreign banks operating under the guidelines of the Reserve Bank of India to deal in equity markets.
- d) A government agency responsible for the regulation and supervision of the securities market.

Q.8) Consider the following statements:

- 1. Participatory Notes (P-Notes) are debt instruments issued by the Indian government to raise funds domestically.
- 2. The Securities and Exchange Board of India (SEBI) oversees the issuance and regulation of P-Notes in India.
- 3. P-Notes can make it difficult to track the true ownership of foreign investments in the Indian stock market.
- 4. P-Notes can be a source of foreign capital for Indian companies, leading to economic growth.

How many of the statements given above are correct?

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

Q.9) Which one of the following is correct regarding a high tax buoyancy?

- a) Tax revenue increases at the same rate as GDP.
- b) Tax revenue decreases while GDP increases.
- c) Tax revenue increases at a higher rate than GDP.
- d) Tax revenue remains constant despite GDP growth.

Q.10) Consider the following statements:

- 1. Countries holding rupee accounts can invest in Indian government securities and treasury bills.
- 2. Vostro account is a type of account held by a government in a domestic bank.

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

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

Q.11) Consider the following statements:

- 1. India sets the Fair and Remunerative Price (FRP) for sugarcane each sugar season.
- 2. The Reserve Bank of India (RBI) has a reference range for inflation between 2% and 6%.

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.12) Gangavaram Port is located at:

- a) Andhra Pradesh
- b) Karnataka
- c) Odisha
- d) Maharashtra



Q.13) A risky and illegal mining activity in developing nations includes children squeezing through tight tunnels to collect rich minerals. This approach frequently results in tunnel collapses and long-term health concerns. Which one of the following is the most likely term for this dangerous mining technique?

- a) Open-pit mining
- b) Surface mining
- c) Rat hole mining
- d) Tunnel mining

Q.14) The Hybrid Annuity Model (HAM) is a type of Public-Private Partnership (PPP) model used for infrastructure development in India. Which one of the following is the main feature that distinguishes HAM from other PPP models?

- a) The project's construction and funding are entirely the responsibility of private enterprises.
- b) The government takes over the project after construction and collects tolls or user fees.
- c) The government and private partner share the costs and responsibilities of the project.
- d) The project is entirely financed by the government, with private companies only involved in construction.

Q.15) Which one of the following policy measures can governments take to mitigate the impact of high food inflation?

- a) Reducing taxes on luxury goods
- b) Increasing subsidies and price controls on staple foods
- c) Deregulating all food prices
- d) Increasing export tariffs on all food products

Q.16) In India, which one of the following is responsible for governing Alternative Investment Funds (AIFs)?

- a) Reserve Bank of India (RBI)
- b) Securities and Exchange Board of India (SEBI)
- c) Insurance Regulatory and Development Authority of India (IRDAI)
- d) Pension Fund Regulatory and Development Authority (PFRDA)

Q.17) Consider the following:

- 1. Providing grants to alleviate debt burden
- 2. Offering policy advice and technical assistance
- 3. Investing in infrastructure projects
- 4. Facilitating currency exchange programs

When a country faces significant debt issues, how many of the above mechanism can be provided by the International Monetary Fund (IMF)?

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

Q.18) An increase in the Wholesale Price Inflation (WPI) would imply which one of the following?

- a) A decrease in the overall cost of living for consumers.
- b) An increase in the average price of goods sold by businesses to each other.
- c) A rise in the interest rates by the central bank.
- d) A decrease in the value of a country's currency.



Q.19) In the context of international trade, what could be a long-term economic impact of the continuous widening of the trade deficit?

- a) Improved international credit rating
- b) Increased dependency on foreign capital
- c) Enhanced domestic industrial base
- d) Greater accumulation of foreign exchange reserves

Q.20) The purpose of a Variable Rate Repo (VRR) auction conducted by the Reserve Bank of India (RBI) is to:

- a) Manage liquidity in the banking system
- b) Provide long-term loans to commercial banks.
- c) Set fixed interest rates for government bonds.
- d) Facilitate direct investment from the public in government securities.

Q.21) In the Indian banking system, which one of the following is the advantage of Asset Reconstruction Companies (ARCs)?

- a) They increase the availability of credit for new borrowers.
- b) They help banks clean up their balance sheets by removing bad loans.
- c) They reduce interest rates for all types of loans.
- d) They create additional paperwork for loan processing.

Q.22) Which one of the following will be the impact of a decrease in Treasury bill supply on the Indian rupee?

- a) It causes the rupee to depreciate
- b) It has no impact on the rupee
- c) It causes the rupee to appreciate
- d) It leads to increased volatility in the rupee

Q.23) The Reserve Bank of India (RBI) has recently issued draft regulations to strengthen the regulatory framework for financing projects with long gestation periods in infrastructure. In this context, which of the following statement(s) is/are correct?

- 1. At the construction stage, a general provision of 3% is to be maintained on all existing and fresh exposures by the banks.
- 2. A positive Net Present Value (NPV) is required for obtaining project finance.

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.24) Which one of the following organizations is responsible for compiling the Consumer Price Index for Industrial Workers (CPI-IW) in India?

- a) National Statistical Office (NSO)
- b) Ministry of Finance
- c) Labour Bureau
- d) Reserve Bank of India (RBI)

Q.25) Consider the following statements:

- 1. The Indian Union Government announces a Minimum Support Price (MSP) for Onion.
- 2. The Coefficient of Variation (CoV) is a key measure of volatility in the prices of vegetables.

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) Consider the following statements:

- 1. Interest on holdings of domestic and foreign securities are the income sources of the Reserve Bank of India (RBI).
- 2. The Reserve Bank of India transfers its surplus to the government to improve the credit rating of the Indian government.
- 3. Bimal Jalan committee's recommendations are currently used to determine the level of surplus transfer from the RBI to the government.

Which of the statements given above are correct?

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

Q.27) An increase in interest rates or a reduction in nominal income growth rate can increase the debt-income ratio if the growth in interest payments exceeds income growth. This economic theory is proposed by:

- a) Keynesian Economics
- b) Fisher Dynamics
- c) Permanent Income Hypothesis
- d) Austrian Business Cycle Theory

Q.28) Consider the following statements:

- 1. Total household savings comprise net financial savings, physical savings, and savings in gold and ornaments.
- 2. Weighted Average Lending Rate (WALR) is the average interest rate on all deposits in a bank.

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

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

Q.29) Consider the following statements:

- 1. RuPay is a domestic card payment network launched in India by the Reserve Bank of India (RBI).
- 2. RuPay cards are categorized as both debit and credit cards.
- 3. Compared to Visa or Mastercard, a benefit of using RuPay cards is its wider global acceptance.

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

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

Q.30) With reference to the trade deficit, which of the following statement(s) is/are correct?

- 1. A trade deficit indicates improvement in manufacturing.
- 2. High level of domestic savings is one of the reasons for the higher trade deficit.
- 3. A rising trade deficit can lead to currency depreciation.

Select the correct answer using the codes given below:

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



Q.31) Consider the following statements:

- 1. India uses ethylene oxide (ETO) as a sterilizing agent to reduce microbial load in finished spice goods.
- 2. India holds a significant share in the global spice market.
- 3. Spices Board of India operates under the Ministry of Commerce and Industry.

How many of the statements given above are correct?

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

Q.32) Which one of the following government bodies is responsible for notifying the Cost Inflation Index (CII) in India?

- a) Reserve Bank of India (RBI)
- b) Ministry of Finance
- c) Central Board of Direct Taxes (CBDT)
- d) Securities and Exchange Board of India (SEBI)

Q.33) Which one of the following best depicts the effect of a 'high base effect' on inflation measurement?

- a) Inflation remains constant despite a significant drop in commodity prices.
- b) Inflation appears lower because the previous year experienced hyperinflation.
- c) Inflation rises steadily over several years without any significant economic changes.
- d) Inflation is unaffected by changes in the base year's price levels.

Q.34) Consider the following statements:

- 1. Infrastructure Investment Trusts (InvITs) provide short-term financing for infrastructure projects.
- 2. Government buildings and social infrastructure projects are the main types of assets held by InvITs.
- 3. InvITs are required to distribute at least 90% of their net cash flow to investors.

How many of the statements given above are correct?

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

Q.35) Recently, the Reserve Bank of India (RBI) has issued the Framework for Recognising Self-Regulatory Organisation for the FinTech Sector (SRO-FT). In this context, which one of the following statements is correct in relation to SRO-FT?

- a) SROs will increase government revenue from FinTech companies.
- b) SROs will act as a regulator for the entire FinTech industry.
- c) SROs will ensure consumer protection, data security, and compliance with industry standards.
- d) SROs will provide financial support to struggling FinTech startups.



1 - (c)	2 – (b)	3 – (b)	4 - (a)	5 - (a)	6 - (a)	7 – (b)
8 – (c)	9 - (c)	10 – (a)	11 - (c)	12 – (a)	13 - (c)	14 - (c)
15 - (b)	16 - (b)	17 – (a)	18 – (b)	19 – (b)	20 – (a)	21 – (b)
22 – (c)	23 - (b)	24 – (c)	25 – (b)	26 – (c)	27 – (b)	28 - (a)
29 – (b)	30 - (c)	31 - (c)	32 – (c)	33 – (b)	34 – (a)	35 – (c)

Answer Key

Answers & Explanations

1. Correct Answer is (C)

• All three funds are managed by the AMCs. AMCs are financial institutions that pool investment capital from various investors and manage those funds by investing in a variety of assets, including stocks, bonds, commodities, and real estate. Hedge funds, gold funds, and equity funds are all different types of investment offered by AMCs. The primary objective of AMCs is to generate profitable returns for their investors by managing their pooled investments effectively. These are regulated by SEBI.

Source: The Hindu

2. Correct Answer is (B)

• The "economic pie" is often used as a metaphor to represent the aggregate wealth or resources in a country or economy. The economic pie is a metaphor used to represent the total value of goods and services produced in an economy. In other words, it's the size of the whole economic "cake" to be divided.

Source: <u>The Hindu</u>

3. Correct Answer is (B)

- Statement 1 is incorrect. In 2023, India's share in global goods exports was 1.8%, and in global services exports, India's share rose to 4.6% from 2% in 2005, indicating a more significant increase in the share of global services exports than in goods exports.
- Statement 2 is correct. The growth in services exports in India has acted as a buffer against external shocks such as high oil prices. A strong services sector, particularly in IT-enabled services, has helped generate foreign exchange earnings, create jobs, and contribute to economic growth. This resilience in the services sector has provided some cushion against external factors like high oil prices, which can negatively impact the economy by increasing the cost of imports and widening the trade deficit.

Source: <u>The Hindu</u>

4. Correct Answer is (A)

- Statement-I: India's steel exports to Europe hit a five-year high in FY24, reaching 3.3 million tonnes (mt), marking a significant increase of 65% year-on-year.
- Statement-II: Indian steel manufacturers have been able to increase their exports to the European Union due to their competitive pricing in the global market. The lower steel prices in India can be



attributed to factors such as lower input costs, efficient production processes, and government support. Other factors that increased the steel exports are demand fluctuations, re-stocking trends in the EU, and a weak dollar that influenced the Euro to U.S. dollar exchange rate.

• Note: While there has been increase in the steel exports to the EU, steel exports to the UAE and Southeast Asia have faced challenges from competition from China.

Source: <u>The Hindu</u>

5. Correct Answer is (A)

- Statement 1 is correct. India is the world's largest importer of vegetable oils. Compared to other vegetable oils like sunflower or soybean oil, palm oil is generally cheaper due to its high yield per hectare of land cultivated.
- Statement 2 is incorrect. Indonesia is the largest exporter of palm oil to India, followed by Malaysia, Thailand, Singapore, and Papua New Guinea.

Source: <u>The Hindu</u>

6. Correct Answer is (A)

• The Reserve Bank of India (RBI) conducts Open Market Operations (OMOs), which include the purchase of Government Securities (G-Secs) from the open market. This action is primarily aimed at managing the liquidity conditions in the market. When the RBI buys G-Secs, it injects liquidity into the market, which can encourage lending and economic activity by making more funds available to banks and other financial institutions.

Source: The Times of India

7. Correct Answer is (B)

• Standalone Primary Dealers (SPDs) are specialized entities that operate in the government securities market. They are authorized by the Reserve Bank of India (RBI) to buy and sell government securities, facilitate the government's borrowing program, and provide liquidity in the secondary market. SPDs operate independently and are not part of a commercial bank or any other financial institution. The Reserve Bank of India (RBI) has recently allowed standalone primary dealers (SPDs) to borrow in foreign currency from their parent companies and entities authorized by it. Standalone primary dealers will also be allowed to access overdraft facilities in nostro accounts solely for operational use.

Source: Forum IAS

8. Correct Answer is (C)

- Statement 1 is incorrect. Participatory Notes (P-Notes) are not debt instruments issued by the Indian government to raise funds domestically. They are financial instruments used by foreign investors to invest in Indian securities without registering directly with SEBI.
- Statements 2, 3 and 4 are correct. SEBI is responsible for regulating and overseeing the issuance and trading of P-Notes in the Indian securities market. P-Notes allow investors to invest in Indian securities without registering with SEBI, it can be difficult to track the true ownership of foreign investments in the Indian stock market. This anonymity raises concerns about potential money laundering and round-tripping of funds. P-Notes allow foreign investors to invest in Indian securities, which can contribute to the inflow of foreign capital. This additional capital can help finance Indian companies' growth and development, thereby supporting the overall economic growth of the country.

Source: <u>The Times of India</u>

9. Correct Answer is (C)

• Tax buoyancy measures the responsiveness of tax revenue to changes in the Gross Domestic Product (GDP). High tax buoyancy occurs when tax revenue increases at a higher rate than GDP,



indicating that the tax system is efficient and effective in capturing revenue from the growing economy.

Source: <u>The Times of India</u>

10. Correct Answer is (A)

- Statement 1 is correct. Countries with bilateral trade settlements in Indian rupees (INR) can invest in Indian government securities and treasury bills through their rupee accounts. The Reserve Bank of India (RBI) added this provision to the Foreign Exchange Management (Debt Instruments) Regulations in 2019. The funds used to purchase securities must come from the rupee account, and any sale or maturity proceeds are credited to the same account.
- Statement 2 is incorrect. A Vostro account is a type of account held by a domestic bank (in India) on behalf of a foreign bank. It is not held by a government. A Vostro account enables the foreign bank to provide services to its clients in the domestic bank's country. For example, a Vostro account held by an Indian bank on behalf of a foreign bank allows the foreign bank's clients to conduct transactions in India.

Source: <u>The Hindu</u>

11. Correct Answer is (C)

• Statements 1 and 2 are correct. The Indian government sets the Fair and Remunerative Price (FRP) for sugarcane each sugar season. The FRP is the minimum price that sugar mills are legally required to pay sugarcane farmers. The Commission for Agricultural Costs and Prices (CACP) recommends the FRP, which is then approved by the Cabinet Committee on Economic Affairs. The FRP aims to ensure fair compensation for farmers while maintaining the financial viability of sugar mills. In addition to the Fair and Remunerative Price (FRP) set by the central government, some Indian states also set their own minimum prices for sugarcane, known as State-Advised Prices (SAPs). These SAPs are typically set to address regional differences in production costs and to provide additional support to sugarcane farmers in those states. In states where SAPs are applicable, sugar mills are required to pay the higher of the FRP or SAP to the farmers. The Reserve Bank of India (RBI) has a reference range for inflation, specifically targeting an inflation rate of 4% with a tolerance band of +/- 2%, effectively setting the range between 2% and 6%.

Source: <u>The Hindu</u>

12. Correct Answer is (A)

• Gangavaram Port, also known as Visakhapatnam Port or Vizag Port, is located in the state of Andhra Pradesh. It is a deep-water port that has been operational since 2009.

Source: <u>The Hindu</u>

13. Correct Answer is (C)

• Rat hole mining is a hazardous, crude, and unscientific technique often practiced in developing nations. It involves digging small vertical pits or tunnels, often by hand, to extract minerals such as coal, gold, or precious gemstones. These tunnels can be as narrow as 3-4 feet in diameter, and miners (including children) have to crawl or use makeshift carts to navigate through them.

Source: <u>The Hindu</u>

14. Correct Answer is (C)

• In the HAM model, the government and the private partner each bear a portion of the project cost, typically 40% and 60%, respectively. The private partner is responsible for the construction and maintenance of the project for a specified period, usually around 15 years. During the operations period, the government collects tolls or user fees and pays a fixed annuity to the private partner, sharing both the financial burden and revenue generated by the project. This model aims to balance the risks and rewards between the public and private sectors while ensuring the successful development and maintenance of infrastructure projects.



Source: <u>The Hindu</u>

15. Correct Answer is (B)

• High food inflation can make basic food items unaffordable for many people, particularly the lower-income population. To address this issue, governments can implement policies such as increasing subsidies on essential food items and setting price controls to help keep the costs down. These measures can ensure that people have access to affordable food and can help reduce the overall impact of high food inflation.

Source: <u>The Hindu</u>

16. Correct Answer is (B)

• SEBI is the regulatory authority for the securities market in India and is responsible for protecting the interests of investors and ensuring the orderly functioning of the securities market. SEBI regulates AIFs, which are privately pooled investment vehicles that collect funds from sophisticated investors, including Indian and foreign entities, to invest in a range of asset classes.

Source: <u>The Hindu</u>

17. Correct Answer is (A)

- **Providing grants to alleviate debt burden** The IMF does not provide grants to alleviate debt burdens directly. The IMF offers financial assistance through loans to countries facing economic challenges. These loans come with conditions that encourage economic reforms.
- **Offering policy advice and technical assistance** The IMF provides extensive policy advice and technical assistance to member countries to help manage and resolve their debt issues. This includes assistance in formulating debt management strategies and economic policies to restore debt sustainability.
- **Investing in infrastructure projects** The IMF does not invest in infrastructure projects. Its role is primarily focused on financial stability and providing policy advice and financial assistance rather than direct investment in infrastructure.
- **Facilitating currency exchange programs** The IMF facilitates financial stability and may provide financial resources to help countries stabilize their currency. However, it does not specifically run currency exchange programs. Its financial assistance often aims to support balance of payments needs, which can indirectly help stabilize a country's currency.

Source: <u>The Hindu</u>

18. Correct Answer is (B)

• An increase in the Wholesale Price Inflation (WPI) implies a rise in the average price of goods sold by businesses to each other at the wholesale level. WPI measures changes in the prices of goods in bulk transactions between businesses, so an increase in WPI means businesses are paying more for the products they buy from other businesses. This increase in costs at the wholesale level can eventually affect retail prices for consumers if the businesses pass on the higher costs.

Source: <u>The Hindu</u>

19. Correct Answer is (B)

• A continuous trade deficit means that a country is importing more than it is exporting, leading to a negative balance of trade. To finance this deficit, the country often relies on foreign capital, either through borrowing or attracting foreign investment. This increased reliance on foreign capital can make the country more vulnerable to changes in global financial markets, interest rates, and the economic conditions of its lending partners.

Source: <u>The Hindu</u>

20. Correct Answer is (A)



• The primary purpose of a Variable Rate Repo (VRR) auction conducted by the Reserve Bank of India (RBI) is to manage liquidity in the banking system. This involves injecting short-term liquidity into the system when there is a deficit or absorbing excess liquidity when there is a surplus. By conducting VRR auctions, the RBI aims to maintain financial stability and ensure that money market interest rates evolve systematically. This helps in managing the overall liquidity conditions in the economy and supports the smooth functioning of the banking system.

Source: <u>The Hindu</u>

21. Correct Answer is (B)

• Asset Reconstruction Companies (ARCs) play a crucial role in the Indian banking system by purchasing non-performing assets (NPAs) or bad loans from banks. This process helps banks clean up their balance sheets, which in turn improves their financial health and allows them to focus on providing credit to new borrowers.

Source: <u>The Hindu</u>

22. Correct Answer is (C)

• A decrease in Treasury bill supply is generally seen as a sign of economic strength and rising yields, which attracts more foreign investment into Indian bonds and equities. This increased demand for Indian assets leads to higher demand for the Indian rupee, causing it to appreciate against other currencies like the US dollar.

Source: The Print

23. Correct Answer is (B)

- Statement 1 is incorrect. The RBI has proposed that banks should maintain a general provision during the construction stage of projects with long gestation periods. The proposed provision is 5% on all existing and fresh exposures by the banks. This provision is aimed at mitigating potential risks associated with such projects and ensuring stability in the banking sector.
- Statement 2 is correct. The draft regulations require that the projects must have a positive Net Present Value (NPV) to be eligible for project finance. The NPV is a financial metric that considers the time value of money and assesses the long-term profitability and viability of a project.

Source: <u>The Hindu</u>

24. Correct Answer is (C)

• The Labour Bureau, under the Ministry of Labour and Employment, is responsible for compiling and releasing the CPI-IW in India. The index is a measure of inflation and is primarily used to determine the rate of inflation faced by industrial workers. Additionally, the index is also used to calculate the dearness allowance (DA) for government employees and workers in the organized sector.

Source: <u>The Hindu</u>

25. Correct Answer is (B)

- Statement 1 is incorrect. The Indian Union Government does not announce a Minimum Support Price (MSP) for onions. MSP is typically announced for certain staple crops like cereals, pulses, and oilseeds, but onions are not included in this list. Instead, the government uses other measures, such as maintaining an onion buffer stock and imposing export restrictions, to stabilize onion prices.
- Statement 2 is correct. The Coefficient of Variation (CoV) is used as a key measure to analyze the volatility in the prices of vegetables. It helps in understanding the extent of variability in relation to the mean price and is commonly used in studies analyzing price fluctuations of agricultural commodities.

Source: The Hindu

26. Correct Answer is (C)



- Statements 1 and 3 are correct. The Reserve Bank of India (RBI) earns income through various means, including interest on holdings of domestic and foreign securities. This is a significant source of profit for the RBI, as it involves open market operations where the central bank purchases or sells bonds in the open market to regulate money supply in the economy. The Bimal Jalan Committee's recommendations are currently used to determine the level of surplus transfer from the RBI to the government. The committee was formed to review the Economic Capital Framework (ECF) of the RBI, and it recommended a formula-based approach for surplus transfer, ensuring transparency and clarity in the process.
- Statement 2 is incorrect. The primary reason the Reserve Bank of India transfers its surplus to the government is not to improve the government's credit rating. Instead, the surplus transfer is a part of the RBI's annual financial operations, where the excess of income over expenditure, after making adequate provisions for contingencies and reserves, is transferred to the government. This process is governed by the RBI Act, 1934, and helps in supporting the government's finances.

Source: <u>The Hindu</u>

27. Correct Answer is (B)

• Fisher Dynamics was proposed by Irving Fisher, an American economist, in the early 20th century. It is based on the concept that debt levels can become unsustainable over time if interest payments outpace income growth, even if the initial level of debt appears manageable. Fisher proposed that a combination of increased interest rates, reduced income growth, or a combination of both can lead to a debt-income ratio that increases indefinitely.

Source: <u>The Hindu</u>

28. Correct Answer is (A)

- Statement 1 is correct. Total household savings include net financial savings (savings minus consumption), physical savings (household durables like furniture, cars, etc.), and savings in the form of gold and ornaments. These savings forms are considered essential for households to create a financial buffer against unforeseen circumstances and future expenditures.
- Statement 2 is incorrect. The Weighted Average Lending Rate (WALR) represents the average interest rate on all loans issued by a bank, weighted by the loan amounts, not deposits.

Source: The Hindu

29. Correct Answer is (B)

- Statements 1 and 3 are incorrect. RuPay is a domestic card payment network in India, but it was launched by the National Payments Corporation of India (NPCI). RuPay cards are primarily designed for domestic use within India and have limited international acceptance compared to Visa or Mastercard, which are widely accepted globally. Recently, Maldives is set to introduce India's RuPay service.
- Statement 2 is correct. RuPay offers both debit and credit cards, as well as prepaid cards.

Source: AIR

30. Correct Answer is (C)

- Statements 1 and 2 are incorrect. A trade deficit occurs when a country's imports exceed its exports, which does not necessarily indicate an improvement in manufacturing. In fact, it often suggests that the country is importing more goods than it is producing and exporting. A high level of domestic savings reduces the trade deficit because it means the country relies more on domestic capital rather than foreign capital. A trade deficit is more commonly associated with low domestic savings and high consumption of imported goods.
- Statement 3 is correct. A rising trade deficit can put downward pressure on a country's currency because it increases the demand for foreign currencies to pay for imports, leading to a depreciation of the local currency.



Source: The Hindu

31. Correct Answer is (C)

• Statements 1, 2 and 3 are correct. Ethylene oxide (ETO) is used in India as a sterilizing agent to reduce the microbial load in spices and other food products. It is used to ensure the elimination of pathological microbes and to extend the shelf life of the products. India is the world's leading producer and exporter of spices, holding a significant share in the global spice market. The country exports spices to almost 180 countries and has seen a substantial increase in spice exports over the years. The Spices Board of India operates under the Ministry of Commerce and Industry, Government of India. It is responsible for the development and promotion of Indian spices.

Source: <u>The Hindu</u>

32. Correct Answer is (C)

• The CBDT, a part of the Ministry of Finance, is responsible for notifying the CII every year. This index is used for calculating capital gains tax on the sale of assets like property and stocks.

Source: AIR

33. Correct Answer is (B)

• The base effect refers to the impact of the price levels in the previous year (the base year) on the calculation of the current year's inflation rate. A high base effect occurs when the price levels in the base year were exceptionally high. When the base year had very high inflation or hyperinflation, even a relatively smaller increase in prices in the current year will result in a lower calculated inflation rate compared to the base year. This is because the base for comparison is already elevated due to the high inflation in the previous year.

Source: The Hindu

34. Correct Answer is (A)

- Statements 1 and 2 are incorrect. InvITs provide long-term financing for infrastructure projects, not short-term financing. They are designed to pool money from various investors to invest in income-generating infrastructure assets, which typically have long gestation periods. The main types of assets held by InvITs include roads and highways, power distribution networks, telecom towers, fiber optic networks, and other infrastructure projects.
- Statement 3 is correct. InvITs are required to distribute at least 90% of their net distributable cash flow to investors. This distribution is typically done through dividends and interest payouts, providing a consistent income stream to investors.

Source: AIR

35. Correct Answer is (C)

• The primary role of SROs in the FinTech sector, as outlined by the RBI's framework, is to ensure consumer protection, data security, and compliance with industry standards. They are responsible for establishing and enforcing regulatory standards, promoting ethical conduct, resolving disputes, and fostering transparency and accountability among their members.

Source: The Hindu



Environment

Q.1) Consider the following statements:

- 1. Methane is the second most abundant anthropogenic greenhouse gas.
- 2. The warming potential of methane is significantly lower than that of carbon dioxide (CO2).
- 3. Thermogenic methane originates from microbial activity, while biogenic methane is released during the extraction of fossil fuels.
- 4. Methanogens are single-celled archaea that produce methane in oxygen-deficient environments like wetlands, rice paddies, landfills, and the digestive tracts of animals.

How many of the statements given above are correct?

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

Q.2) Consider the following:

- 1. Coral Bleaching
- 2. Increase in the frequency of cyclones
- 3. Drought in India

Which of the above will be the consequences of warming Indian Ocean?

- 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 statements:

- 1. Global warming will lead to colder weather and more snow.
- 2. Climate change can increase the prevalence of vector-borne diseases.

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

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

Q.4) Consider the following statements:

- 1. The Sustainable Development Goals (SDGs) are a set of interconnected global objectives established by the United Nations in 2015.
- 2. The SDGs are binding on all countries and must be met by 2030.
- 3. SDG-5 focuses on clean water and sanitation.

How many of the statements given above are correct?

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

Q.5) Which one of the following is capable of using a plant to treat its wound?

- a) Lion
- b) Orangutan
- c) Butterfly
- d) Jelly fish



Q.6) Consider the following statements:

- 1. Air Quality Index (AQI) provides a color-coded system to indicate air quality health risks.
- 2. Air Quality Early Warning System (AQEWS) provides advanced warnings of potential air quality deterioration.
- 3. Commission for Air Quality Management (CAQM was established under the Environment Protection Act, 1986.
- 4. The Graded Response Action Plan (GRAP) is aimed at providing financial assistance to industries for adopting cleaner technologies.

How many of the statements given above are correct?

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

Q.7) Consider the following:

- 1. Deforestation
- 2. Fragmented Forests
- 3. Climate Change
- 4. Solar Flares

How many of the above factors are responsible for forest fires?

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

Q.8) Which one of the following statements best defines the term 'Carbon Farming'?

- a) It involves the intentional planting of high-carbon crops for the purpose of releasing carbon dioxide into the atmosphere to increase plant growth.
- b) It is a method of industrial carbon capture and storage to reduce atmospheric CO2 levels.
- c) It is the practice of using agricultural methods to increase carbon sequestration in the soil, thereby enhancing soil health and mitigating climate change.
- d) It is the intensive use of heavy machinery and equipment on farms to capture carbon emissions and redistribute them across the land to improve soil quality.

Q.9) Consider the following:

- 1. Carbon offsets
- 2. Command-and-Control Regulations
- 3. Deforestation-free certification schemes
- 4. Community-based Management
- 5. Payment for Ecosystem Services (PES)
- 6. Reducing Emissions from Deforestation and Forest Degradation (REDD)

Which of the above are considered as market-based approaches to forest conservation?

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



Q.10) Consider the following statements:

- 1. Brazil, China, India, and the U.S. account for 60% of the world's plastic waste.
- 2. Plastic Waste Management Amendment Rules (2021), implemented by India, do not cover plastic bottles and multi-layered packaging such as milk cartons.

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

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

Q.11) Consider the following statements:

- 1. China is the leading producer of solar power globally.
- 2. India has surpassed Japan in terms of installed solar power capacity.
- 3. Solar power constitutes 18% of India's total installed electricity capacity.

Which of the statements given above are correct?

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

Q.12) In the context of carbon offset markets, the term "carbon leakage" refers to:

- a) Unintended emissions of carbon dioxide during the implementation of the offset projects.
- b) The shift in emissions from regions with strict environmental laws to those that have less stringent rules.
- c) The reduction in carbon offset credits' value due to changes in the carbon market.
- d) The migration of carbon offset projects from the Voluntary Market to a Conformity Market.

Q.13) Which one of the following statements about hydrogen-based steelmaking (green steel) processes is correct?

- a) Hydrogen-based steelmaking processes emit more carbon dioxide than traditional steelmaking methods.
- b) Hydrogen-based steelmaking processes are in the experimental stage and have not been implemented on an industrial scale.
- c) Hydrogen-based steelmaking processes utilize hydrogen as a reducing agent instead of coal, resulting in lower carbon emissions.
- d) Hydrogen-based steelmaking processes are only feasible in regions with abundant renewable energy sources.

Q.14) With reference to the Glyptothorax punyabratai, consider the following statements:

- 1. It is a new catfish species.
- 2. It is mainly found in the Indian Ocean.
- 3. Its presence contributes to the regulation of prey populations and nutrient cycling.

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.15) With reference to the Sonai Rupai Wildlife Sanctuary, consider the following statements:

- 1. It is situated in the foothills of the Eastern Himalayas.
- 2. The sanctuary is primarily known for its elephant and Indian bison populations.
- 3. It is bordered by the Gabharu River to the west.

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.16) Consider the following statements regarding the Semal tree (Bombax ceiba):

- 1. It is a deciduous tree native to India.
- 2. It is commonly referred to as the woollen tree.
- 3. It is a keystone species in its native ecosystems.
- 4. It is valued in traditional practices such as Ayurveda.

Which of the statements given above are correct?

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

Q.17) Consider the following:

- 1. Controlling soil erosion
- 2. Checking surface run-off
- 3. Higher decomposition rate
- 4. Promoting vegetation growth

How many of the above are the benefits of using 'Coir Geotextiles'?

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

Q.18) Pine needles are used in electricity generation through the process of:

- a) Photovoltaic conversion
- b) Hydrolysis
- c) Biomass gasification
- d) Nuclear fission

Q.19) Which one of the following metals is NOT commonly extracted through biomining?

- a) Copper
- b) Gold
- c) Uranium
- d) Aluminum

Q.20) Consider the following products:

- 1. Paper
- 2. Cardboard
- 3. Organic food waste
- 4. Non-recyclable plastics

Which of the above materials are included in Refuse-Derived Fuel (RDF) production?

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



Q.21) With reference to Soil Nailing, consider the following statements:

- 1. It is a geotechnical engineering technique that involves the insertion of reinforcing elements into the soil in a specified area to strengthen it.
- 2. It involves drilling steel tendons into the soil and grouting them in place to form a composite structure akin to a gravity wall.

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.22) Consider the following statements regarding the Armoured Sailfin Catfish (Pterygoplichthys):

- 1. It is classified as an invasive species.
- 2. It has high prominence in the ornamental fish industry.
- 3. It is known for consuming large quantities of native fish, threatening the balance of aquatic ecosystems.

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.23) Consider the following:

- 1. Increased agricultural productivity
- 2. Increased soil erosion
- 3. Loss of habitat for wildlife

How many of the above are the consequences of decline in tree cover area?

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

Q.24) Consider the following statements regarding the 'Iberian Lynx':

- 1. It is endemic to the Western Ghats in India.
- 2. It is listed as Endangered on the IUCN Red List.
- 3. Of all lynx, the Iberian has the most heavily spotted coat.

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.25) Consider the following statements regarding the Lion-tailed macaque:

- 1. They are endemic to the rainforests of the Western Ghats.
- 2. They are is classified as Critically Endangered in the IUCN Red List of Threatened Species.
- 3. They are active only during daylight hours.
- 4. They spend most of their time on the ground in the forest.

How many of the statements given above are correct?

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



Q.26) Waterhole Count Method, seen in the news recently, is used in which one of the following?

- a) Monitoring fish populations in large rivers
- b) Estimating the number of migratory birds in wetlands
- c) Counting the population of aquatic plants in lakes
- d) Assessing wildlife numbers at water sources during dry seasons

Q.27) With reference to the Killer Whales, consider the following statements:

- 1. Killer whales are found in all oceans.
- 2. They rely on underwater sound to feed, communicate, and navigate.
- 3. They are categorized as Endangered in the IUCN Red List of Threatened species.

How many of the statements given above are correct?

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

Q.28) Which one of the following trees is known for its thick trunk, leafless branches which resemble roots, giving the tree an upside-down appearance?

- a) Bottle Tree
- b) Kapok Tree
- c) Baobab Tree
- d) Sausage Tree

Q.29) Consider the following statements:

- 1. Sea otters spend most of their time in the water.
- 2. Sea otters play a crucial role in preserving tropical coral reefs.
- 3. Sea otters are classified as 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.30) Consider the following statements:

- 1. Flamingos stand on one leg.
- 2. Flamingos have long legs that are often longer than their bodies.
- 3. Flamingos dive deep underwater to catch fish.

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.31) Consider the following Missions:

- 1. National Mission for Sustainable Habitat
- 2. National Mission on Strategic Knowledge for Climate Change
- 3. National Bio-Energy Mission
- 4. National Water Mission

How many of the above are part of the National Action Plan on Climate Change (NAPCC)?

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



Q.32) Consider the following statements with respect to Loss & Damage (L&D) Fund:

- 1. Loss and Damage Fund covers both economic and non-economic losses.
- 2. The fund targets developing countries that are particularly vulnerable to climate change impacts.
- 3. The United Nations Development Programme (UNDP) oversees the initial coordination of the fund.
- 4. There is a lack of a universally agreed-upon definition of loss and damage.

How many of the statements given above are correct?

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

Q.33) Consider the following statements:

- 1. Microplastics can accumulate in the bodies of organisms through bioremediation.
- 2. Ashtamudi Lake is a Ramsar wetland located in Kerala.

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

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

Q.34) With reference to the Himalayan Ibex, consider the following statements:

- 1. They are omnivorous animals.
- 2. They can be found in Jammu and Kashmir.
- 3. They have thick, shaggy coat that helps them to survive in the harsh mountain environment.

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) Which one of the following organisms has the capability of sensing electric fields around them?

- a) Caterpillars
- b) Bats
- c) Beetle
- d) Ants

Q.36) Consider the following statements:

- 1. Eucalyptus trees are native to Australia.
- 2. Leaves of Eucalyptus tree is used to extract oil.
- 3. Eucalyptus plantations have a rotation age of two years.

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.37) Consider the following:

- 1. Reforestation
- 2. Reintroduction of native species
- 3. Removal of invasive species
- 4. Bioremediation

How many of the above methods are used in Eco-restoration?

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

Answer Key

	1 – (b)	2 – (d)	3 – (b)	4 - (a)	5 – (b)	6 – (b)	7 – (c)	8 – (c)	9 – (d)	10 - (c)
	11 - (c)	12 – (b)	13 - (c)	14 - (c)	15 – (a)	16 – (d)	17 - (c)	18 - (c)	19 – (d)	20 – (c)
	21 – (c)	22 – (d)	23 – (b)	24 – (b)	25 – (b)	26 - (d)	27 – (b)	28 - (c)	29 – (c)	30 – (a)
	31 - (c)	32 – (c)	33 – (b)	34 - (b)	35 – (a)	36 - (a)	37 – (d)			
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Answers & Explanations

1. Correct Answer is (B)

- Statements 1 and 4 are correct. Methane (CH4) is the second most abundant human-caused (anthropogenic) greenhouse gas, following carbon dioxide (CO2). Methanogens are single-celled archaea that thrive in oxygen-limited environments. They break down organic matter and release methane as a byproduct. Wetlands, rice paddies, landfills, and animal digestive tracts are all common habitats for methanogens.
- Statements 2 and 3 are incorrect. The warming potential of methane is significantly higher than that of carbon dioxide. While it stays in the atmosphere for a shorter time, it traps much more heat while it's there. Thermogenic methane comes from the breakdown of buried organic matter under high pressure and temperature, over geological timescales. Biogenic methane, on the other hand, is produced by living organisms like methanogens or microbial activity.

Source: The Hindu

- 2. Correct Answer is (D)
- **Coral Bleaching**: Marine heatwaves, which are a result of the warming Indian Ocean, lead to coral bleaching.
- **Increase in the Frequency of Cyclones:** The warming of the Indian Ocean contributes to the rapid intensification of cyclones and an increase in their frequency.
- **Drought in India:** Warming Ocean temperatures can influence atmospheric circulation patterns, such as the Indian Ocean Dipole and El Niño events. These changes can disrupt monsoon patterns and rainfall distribution over India, potentially leading to droughts or uneven rainfall patterns that negatively impact agriculture and water resources.



Source: <u>The Hindu</u>

3. Correct Answer is (B)

- Statement 1 is incorrect. Global warming generally leads to warmer temperatures and can cause changes in precipitation patterns, leading to less snow in some areas.
- Statement 2 is correct. Climate change can impact the distribution and abundance of disease vectors, such as mosquitoes, ticks, and rodents. Warmer temperatures, altered precipitation patterns, and changing ecosystems can create more favorable conditions for these vectors, increasing the transmission of diseases like malaria, dengue fever, and Lyme disease.

Source: <u>The Hindu</u>

4. Correct Answer is (A)

- Statement 1 is correct. The Sustainable Development Goals (SDGs) are a set of 17 interconnected global objectives established by the United Nations in 2015. These goals aim to address various global challenges, including poverty, inequality, climate change, environmental degradation, and peace and justice.
- Statements 2 and 3 are incorrect. The SDGs are not legally binding on countries. They are voluntary and aspirational. Countries are expected to take ownership and establish national frameworks for achieving these goals by 2030, but they are not mandatory. SDG-5 focuses on achieving gender equality and empowering all women and girls.

Source: <u>The Hindu</u>

5. Correct Answer is (B)

• Orangutans have been observed using various plants for medicinal purposes, including the treatment of wounds. They have been seen applying chewed-up leaves or leaf-saliva mixtures on their wounds, helping to heal injuries or prevent infections. This behavior is considered a form of zoopharmacognosy, where non-human animals self-medicate by using plants or other substances to treat illnesses or injuries. Chimpanzees are also capable of using plants for medicinal purposes.

Source: The Times of India

6. Correct Answer is (B)

- Statements 1 and 2 are correct. The Air Quality Index (AQI) uses a color-coded system to indicate the health risks associated with air quality. This system measures air quality in relation to certain pollutants and the associated health risks at various levels, with each color representing a different level of health concern. The Air Quality Early Warning System (AQEWS) is designed to predict extreme air pollution events and provide warnings about potential air quality deterioration in advance.
- Statements 3 and 4 are incorrect. The Commission for Air Quality Management (CAQM) was established as a statutory body by the government in August 2021, under the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021. It was formed to carry out air quality management in Delhi NCR and has overarching powers in achieving its mandate, including the authority to take measures, issue directions, and entertain complaints for the purpose of protecting and improving the quality of air. The Graded Response Action Plan (GRAP) is an emergency response plan implemented in the National Capital Region (NCR) to tackle severe air pollution. It outlines a set of measures to be taken based on the severity of air pollution levels, such as restrictions on industrial activities, construction, and transportation, among others.

Source: <u>The Times of India</u>

7. Correct Answer is (C)

• Deforestation: Deforestation can lead to the accumulation of dry vegetation on the forest floor, which can act as fuel for fires.



- Fragmented Forests: Forest fragmentation can increase the vulnerability of forests to fires by creating more exposed edges and reducing the resilience of the ecosystem.
- Climate Change: Climate change can lead to prolonged droughts, higher temperatures, and shifts in precipitation patterns, creating more favorable conditions for forest fires.
- However, Solar Flares are not directly responsible for forest fires. While solar flares can disrupt electronic communications and power grids, they do not have a direct impact on the ignition or spread of wildfires.

Source: The Times of India

8. Correct Answer is (C)

• Carbon farming refers to the implementation of various agricultural practices aimed at enhancing the sequestration of atmospheric carbon into the soil and plant tissues. This is achieved through methods such as conservation tillage, agroforestry, cover cropping, and crop rotation. These practices not only improve soil health and productivity but also contribute to climate change mitigation by reducing the amount of CO2 in the atmosphere.

Source: <u>The Hindu</u>

9. Correct Answer is (D)

• Market-based approaches to forest conservation involve utilizing economic incentives and market mechanisms to promote sustainable forest management and reduce deforestation. Some of the market-based approaches are as follows: Carbon offsets, Deforestation-free certification schemes, Payment for Ecosystem Services (PES), Reducing Emissions from Deforestation and Forest Degradation (REDD). However, Command-and-control regulations and community-based management are not market-based approaches since they do not primarily rely on financial incentives or trade mechanisms to achieve forest conservation goals.

Source: <u>The Hindu</u>

10. Correct Answer is (C)

• Statements 1 and 2 are correct. Brazil, China, India, and the United States are among the largest contributors to plastic waste globally. Together, they account for around 60% of the total plastic waste generated worldwide. The Plastic Waste Management Amendment Rules (2021) implemented by India do not cover all types of plastic waste. While the rules ban certain single-use plastic items, they do not include plastic bottles (even those less than 200 ml) and multi-layered packaging boxes, such as milk cartons. The primary focus of the amendment is on banning specific single-use plastic items that have low utility and high littering potential.

Source: <u>The Hindu</u>

11. Correct Answer is (C)

- Statements 1 and 3 are correct. Globally, renewable energy sources contributed to 30% of the electricity produced in 2023, with China leading the increase in solar and wind power generation. China is the leading producer of solar power globally, generating 584 BU of solar power in 2024, more than the four countries combined the United States, Japan, Germany, and India. According to data from NITI Ayog, as of May 2024, solar power constitutes 18% of India's total installed electricity capacity of 442 GW but accounts for only 6.66% of the actual power produced.
- Statement 2 is incorrect. In 2023, India surpassed Japan to become the world's third-highest producer of solar power. While India outpaced Japan in solar power production, it remains behind in terms of installed power capacity. India's total installed power capacity is 73 gigawatts (GW), placing it fifth globally, while Japan holds the third position with 83 GW.

Source: <u>The Hindu</u>

12. Correct Answer is (B)



• Carbon leakage refers to the phenomenon where efforts to reduce emissions in one region or sector leads to an increase in emissions in another region or sector. This typically occurs when restrictive environmental policies in one country cause industries that produce high levels of greenhouse gases to relocate to countries with less stringent regulations. This shift can undermine the overall effectiveness of emission reduction efforts.

Source: <u>The Hindu</u>

13. Correct Answer is (C)

• Hydrogen-based steelmaking processes aim to reduce or eliminate the carbon emissions associated with traditional steel production. In these processes, hydrogen serves as a reducing agent in place of coal-based coke, which significantly reduces carbon dioxide emissions. The primary byproduct of hydrogen-based steelmaking is water, making it a potentially cleaner alternative to conventional methods. Technologies involved in Hydrogen-based steelmaking processes are: Direct Reduction of Iron (DRI), Electric Arc Furnaces (EAFs), hot briquetted iron (HBI).

Source: <u>The Hindu</u>

14. Correct Answer is (C)

- Statements 1 and 3 are correct. Glyptothorax punyabratai is a new catfish species discovered in the Brahmaputra River drainage system in Arunachal Pradesh, India. It was first described by researchers from the ICAR-National Bureau of Fish Genetic Resources (ICAR-NBFGR) in 2023. The presence of Glyptothorax punyabratai, like other fish species, contributes to the regulation of prey populations and nutrient cycling in the aquatic ecosystem.
- Statement 2 is incorrect. Glyptothorax punyabratai was found in the Tung Stream, a tributary of the Tissa River, which is part of the Brahmaputra River drainage system. It lives in certain freshwater areas in India.

Source: Forum IAS

15. Correct Answer is (A)

- Statements 1 and 2 are correct. The Sonai Rupai Wildlife Sanctuary is located in the foothills of the Eastern Himalayas, in the Sonitpur district of Assam, India. It shares a border with the Kameng Reserved Forest of Arunachal Pradesh. It is known as the "Jewel of Assam". Sonai Rupai Wildlife Sanctuary is known for its diverse fauna, including significant populations of Asian elephants and Indian bison (also known as gaur).
- Statement 3 is incorrect. The sanctuary is bordered by the Gabharu River to the east.

Source: Forum IAS

16. Correct Answer is (D)

- Statements 1, 3 and 4 are correct. The Semal tree is a deciduous tree, meaning it sheds its leaves annually, and it is native to India as well as other parts of South and Southeast Asia. The Semal tree plays a crucial role in its native ecosystems by supporting a wide range of wildlife and contributing to ecological balance. The Semal tree is used in traditional medicinal practices, including Ayurveda, where various parts of the tree are utilized for their health benefits. It is known for its antimicrobial, anti-inflammatory, and analgesic properties.
- Statement 2 is incorrect. The Semal tree is commonly known as the silk cotton tree due to the cotton-like fibers produced by its seeds.

Source: <u>The Hindu</u>

17. Correct Answer is (C)

Coir geotextiles are made from natural coconut fiber, which is biodegradable and environmentally friendly. These geotextiles help in stabilizing the soil by providing a protective layer that reduces the impact of raindrops on the soil surface, thereby preventing soil displacement. Additionally, Created with love ♥ by ForumIAS- the knowledge network for civil services.

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they facilitate the growth of vegetation, which further helps in soil stabilization and erosion control. Geotextiles help in reducing surface run-off. By absorbing and retaining water, they slow down the flow velocity, which minimizes erosion and prevents the washing away of soil. However, Coir geotextiles have a much lower decomposition rate than other natural fibers due to their high lignin content.

Source: The Hindu

18. Correct Answer is (C)

• Pine needles can be utilized in electricity generation through the process of biomass gasification. In this process, pine needles and other biomass materials are converted into a combustible gas mixture, called producer gas or syngas, by applying heat and controlling the amount of oxygen present. This syngas can then be used to fuel generators, producing electricity in a renewable and carbon-neutral manner. This method not only helps in generating clean energy but also contributes to managing forest waste and reducing the risk of wildfires.

Source: <u>The Hindu</u>

19. Correct Answer is (D)

• Aluminium is not commonly extracted through biomining. Biomining is a technique that uses microorganisms to extract metals from ores and other materials. This process is also known as bioleaching or bio-oxidation. Commonly extracted metals through biomining include copper, gold, and uranium, among others.

Source: The Hindu

20. Correct Answer is (C)

• Refuse derived fuel (RDF) is made from household and commercial garbage, which includes both biodegradable materials and plastics. It is typically composed of biodegradable waste, non-recyclable plastics, paper, and other combustibles. RDF is produced from combustible components and which are mainly non-recyclable. Materials that are suitable for recycling, such as metals, glass, high-grade plastics, organic food waste and Hazardous Waste are typically excluded from RDF production. Material included in RDF production are: Paper and Cardboard, Non-Recyclable Plastics, Textiles, Rubber and Tires. Moreover, organic food waste is generally excluded from RDF production as it is biodegradable and can be processed through composting or anaerobic digestion to produce organic fertilizers or biogas.

Source: The Hindu

21. Correct Answer is (C)

• Statements 1 and 2 are correct. Soil nailing is a geotechnical engineering technique that involves the insertion of reinforcing elements into the soil to strengthen it. It is commonly used for slope stabilization, retaining walls, and excavation support. The process of soil nailing involves drilling steel tendons (also known as nails) into the soil and grouting them in place to create a composite structure. This structure functions similarly to a gravity wall, as the nails, and the grout act together with the soil to form a stable and reinforced mass.

Source: Forum IAS

22. Correct Answer is (D)

• Statements 1, 2 and 3 are correct. The Armoured Sailfin Catfish (Pterygoplichthys) is considered an invasive species in many parts of the world. It has been introduced outside its native range in South America, often due to releases from the aquarium trade, and has established populations in various countries, causing ecological problems. They are popular in the ornamental fish industry due to their algae-eating behavior and unique appearance. Their ability to thrive in various water conditions and its diet, which includes algae, small fish, and fish eggs, can disrupt the balance of native fish populations. This can lead to ecological problems in the invaded ecosystems.



Source: Forum IAS

23. Correct Answer is (B)

- Decreased agricultural productivity: Deforestation can lead to soil degradation and reduced agricultural productivity over time due to loss of soil fertility and increased erosion.
- Increased soil erosion: Trees play a crucial role in holding the soil together with their roots, and their removal leads to increased soil erosion.
- Loss of habitat for wildlife: Deforestation leads to habitat loss, which severely impacts wildlife, leading to reduced biodiversity and increased risk of extinction for many species.

Source: <u>The Hindu</u>

24. Correct Answer is (B)

- Statement 1 is incorrect. The Iberian Lynx is not found in India. It is endemic to the Iberian Peninsula in Spain and Portugal, specifically in the southwestern region.
- Statements 2 and 3 are correct. The Iberian Lynx is classified as "Endangered" on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. It is the world's most endangered feline species. The Iberian Lynx is known for its distinctive coat, which is typically light brown or gray with numerous dark spots. Compared to other lynx species, the Iberian Lynx has a more heavily spotted coat. This unique feature helps to identify the species and distinguish it from other lynx populations.

Source: <u>The Hindu</u>

25. Correct Answer is (B)

- Statements 1 and 3 are correct. Lion-tailed macaques are arboreal, meaning they primarily live in trees, and they are endemic to the rainforests of the Western Ghats in South India. Lion-tailed macaques are diurnal, which means they are active during the day and sleep at night.
- Statements 2 and 4 are incorrect. Lion-tailed macaques are classified as "Endangered" on the IUCN Red List of Threatened Species. As arboreal primates, lion-tailed macaques spend most of their time in the trees of the forest canopy, rather than on the ground.

Source: <u>The Hindu</u>

26. Correct Answer is (D)

• The Waterhole Count Method is primarily used to estimate wildlife numbers, particularly large mammals, at water sources during dry seasons. As water becomes scarce in arid or semi-arid regions during dry seasons, animals tend to congregate around remaining water sources, making it easier to observe and count them. This method is also used in conducting elephant census. Other two methods are: Block Count Sampling, Dung Count Method.

Source: <u>The Hindu</u>

27. Correct Answer is (B)

- Statements 1 and 2 are correct. Killer whales, also known as orcas, have a cosmopolitan distribution and can be found in all oceans around the world, from polar regions to the Equator. Killer whales are highly social animals and use a sophisticated system of underwater communication through sounds such as clicks, whistles, and pulsed calls. These sounds are essential for their survival as they help in hunting, navigation, and maintaining their social structure.
- Statement 3 is incorrect. Currently, killer whales are categorized as "Data Deficient" on the IUCN Red List of Threatened Species.

Source: Forum IAS

28. Correct Answer is (C)



• The Baobab Tree (Adansonia digitata) is known for its distinctive appearance, characterized by a thick, bottle-shaped trunk, and a spreading, sparse canopy with bare branches that often resemble roots, giving the tree an upside-down appearance. It is a long-lived, deciduous tree native to Africa and Australia, often found in hot, dry savannah regions. The Baobab Tree is also called the "Tree of Life" due to its ability to store water in its massive trunk, which helps it survive in arid environments and provides a crucial water source for various wildlife.

Source: <u>The Hindu</u>

29. Correct Answer is (C)

- Statements 1 and 3 are correct. Sea otters belong to the weasel family and are aquatic animals. They are found along the coasts of the Pacific Ocean in North America and Asia. Sea otters spend most of their time in the water but occasionally come ashore to sleep or rest. The IUCN lists the sea otter as an endangered species due to various threats, including oil spills, predation, poaching, and conflicts with fisheries.
- Statement 2 is incorrect. Sea otters are mainly associated with kelp forests and coastal ecosystems in the northern and eastern North Pacific Ocean. They do not play a significant role in tropical coral reef ecosystems.

Source: Forum IAS

30. Correct Answer is (A)

- Statements 1 and 2 are correct. Flamingos often stand on one leg, a behavior known as unipedal resting or standing. Flamingos have long, slender legs that are typically longer than their bodies, allowing them to wade through shallow water and find food with their bills. Their long legs help them navigate their aquatic habitats efficiently and keep their body elevated above the water's surface. Flamingos are regular migratory visitors. India hosts two species of flamingos: the Greater Flamingo and the Lesser Flamingo. These birds migrate to India from various regions, including Africa, the Middle East, and other parts of Asia, primarily for feeding and breeding purposes.
- Statement 3 is incorrect. Flamingos are filter feeders and primarily feed on small organisms such as algae, crustaceans, and diatoms found in shallow water or mud. They use their unique curved bills to sift through water and mud while moving their head upside down. Flamingos do not dive deep underwater or feed on fish like some other aquatic birds.

Source: <u>The Hindu</u>

31. Correct Answer is (C)

• National Action Plan for Climate Change (NAPCC) is a Government of India's programme launched in 2008 to mitigate and adapt to the adverse impact of climate change. The 8 sub-missions aimed at fulfilling India's developmental objectives with focus on reducing emission intensity of its economy. These are: National Solar Mission, National Mission for Enhanced Energy Efficiency, National Mission on Sustainable Habitat, National Water Mission, National Mission for Sustaining Himalayan Ecosystem, Green India Mission, National Mission for Sustainable Agriculture, National Mission on Strategic Knowledge for Climate Change.

Source: The Hindu

32. Correct Answer is (C)

• Statements 1, 2 and 4 are correct. The Loss and Damage Fund is designed to address both economic losses (such as damage to infrastructure and loss of crops) and non-economic losses (such as loss of culture, displacement, and mental health impacts) caused by climate change. The primary purpose of the Loss and Damage Fund is to assist developing countries that are particularly vulnerable to the adverse effects of climate change, including extreme weather events and slow onset events. There is no universally agreed-upon definition of loss and damage within the United



Nations Framework Convention on Climate Change (UNFCCC), and it can mean different things to different groups.

• Statement 3 is incorrect. The World Bank will oversee the initial coordination of the Loss and Damage Fund, ensuring the efficient allocation of resources and aiding nations in their recovery efforts.

Source: <u>The Hindu</u>

33. Correct Answer is (B)

- Statement 1 is incorrect. Bioremediation refers to the use of microorganisms to degrade or remove pollutants, including microplastics, from the environment. It is a method for reducing pollution, not a process by which microplastics accumulate in organisms. Microplastics can accumulate in the bodies of organisms through processes like bioaccumulation and biomagnification.
- Statement 2 is correct. Ashtamudi Lake is a Ramsar wetland located in the Kollam District of Kerala, India. It was designated as a Wetland of International Importance under the Ramsar Convention on August 19, 2002.

Source: <u>The Hindu</u>

34. Correct Answer is (B)

- Statement 1 is incorrect. The Himalayan Ibex is a herbivore, primarily feeding on grasses, leaves, and shrubs.
- Statements 2 and 3 are correct. The Himalayan Ibex is found in the trans-Himalayan regions of Jammu and Kashmir, as well as Ladakh and Himachal Pradesh. The Himalayan Ibex has a thick, woolly coat that helps them survive in the harsh, cold mountain environment.

Source: Forum IAS

35. Correct Answer is (A)

• Caterpillars have been shown to detect their predators by sensing the static electricity they emit. This ability allows them to respond defensively to electric fields similar to those emitted by their natural predators, such as wasps. While electroreception is known in aquatic and amphibious animals, and since 2013 in arthropods like bumblebees, hoverflies, and spiders, caterpillars are the first land-based creatures found to use this ability to defend against predators.

Source: <u>The Hindu</u>

36. Correct Answer is (A)

- Statements 1 and 2 are correct. Eucalyptus trees are native to Australia and surrounding islands, with a wide variety of species adapted to different climates. Eucalyptus oil is a valuable essential oil extracted primarily from the leaves of certain Eucalyptus species through processes like steam distillation.
- Statement 3 is incorrect. Eucalyptus plantations have a rotation age of nine years, after which they are cut down.

Source: <u>The Hindu</u>

37. Correct Answer is (D)

- **Reforestation**: The process of planting trees in areas where forests have been cut down or destroyed. It is widely used to restore forest ecosystems.
- **Reintroduction of native species**: The process of reintroducing species that were native to an area but have been eradicated. This helps in restoring the natural biodiversity and ecological balance.
- **Removal of invasive species**: The practice of removing non-native species that have disrupted the local ecosystem. This helps native species to recover and restores natural ecosystem functions.
- **Bioremediation**: The use of living organisms, such as plants, fungi, or microbes, to detoxify polluted environments. This is used to restore contaminated soils and water bodies.

Source: Forum IAS



Science & Technology

Q.1) With reference to the Expanded Programme on Immunization (EPI), how many of the following statements are correct?

- 1. It was launched by the World Health Organization (WHO).
- 2. The launch of EPI has helped in eradicating measles globally.
- 3. On the lines of EPI, India also launched its indigenous immunization programme known as Universal Immunization Programme (UIP).
- 4. Herd immunity contribute to the success of EPI programs by protecting individuals who are unable to receive vaccinations.

Select the correct answer using the codes given below:

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

Q.2) Consider the following statements:

- 1. Defence Research and Development Organisation (DRDO) has designed a two-tier Ballistic Missile Defence (BMD) system to track and destroy nuclear and other ballistic missiles both inside and outside the Earth's atmosphere.
- 2. India is also developing its own long-range surface-to-air missile (LRSAM) system under Project Kusha.

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.3) Consider the following:

- 1. Production of rocket fuel
- 2. Cooling equipment
- 3. Construction of buildings

How many of the above are the use of water ice if found in substantial amounts on the moon?

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

Q.4) Consider the following statements:

- 1. The moon orbits the Earth roughly once a month.
- 2. Antares is the brightest star in the constellation of Scorpius.
- 3. The term "occultation" in astronomy describes the increase in light wavelength emitted by an object as it moves away from the viewer.

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.5) Consider the following statements:

1. Quarks are fundamental particles that make up protons and neutrons.

2. Quarks have the capability to exists independently.

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.6) Certain techniques are used in food processing and preservation to ensure that food is frozen quickly while retaining its quality. Which one of the following is the most often utilized material for quick freezing in food processing?

- a) Liquid nitrogen
- b) Liquid oxygen
- c) Liquid carbon dioxide
- d) Liquid helium

Q.7) Which one of the following is the primary purpose of Standard Essential Patents (SEPs) in the technology industry?

- a) Increase the cost of technological products
- b) Protect the intellectual property of minor technological components
- c) Ensure interoperability and standardization across different technological platforms
- d) Restrict the entry of new competitors into the market

Q.8) Consider the following:

- 1. Medical Equipment Sterilization
- 2. Food Industry
- 3. Agriculture
- 4. Household Electrical Appliances

In how many of the above areas Ethylene oxide is used?

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

Q.9) Which one of the following is the primary affected in Thrombocytopenia Thrombosis Syndrome (TTS)?

- a) Red blood cells
- b) Platelets
- c) Muscle cells
- d) Nerve cells

Q.10) Which one of the following nutrients is NOT classified under the primary nutrients in balanced fertilization?

- a) Nitrogen (N)
- b) Phosphorus (P)
- c) Potassium (K)
- d) Zinc (Zn)

Q.11) The term 'Far side of the Moon' was often seen in the news. It refers to -

- a) The side of the Moon that is always illuminated by the Sun.
- b) The side of the Moon that never gets sunlight and is always dark.
- c) The area on the Moon where large impact craters are found.
- d) The side of the Moon that always faces away from Earth.



Q.12) Project-75I aims to:

- a) Develop new fighter jets for the Indian Air Force.
- b) Make new submarines for the Indian Navy.
- c) Upgrade existing warships of the Indian Navy.
- d) Attract foreign investment in India's defense sector.

Q.13) Consider the following statements:

- 1. Colorectal cancer (CRC) is one of the common types of cancer found in India.
- 2. Fusobacterium nucleatum is a bacterium commonly found in the human brain.
- 3. Fusobacterium nucleatum help cancer cells in CRC to escape the immune system and spread within the gut.

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.14) Magnetic Resonance Imaging (MRI) is based on which one of the following principles?

- a) The absorption of X-rays by different tissues in the body.
- b) The reflection of high-frequency sound waves from tissues.
- c) The alignment and realignment of nuclear spins in a magnetic field.
- d) The emission of gamma rays from decaying isotopes.

Q.15) With reference to the West Nile Virus, consider the following statements:

- 1. West Nile virus mainly infects birds.
- 2. Aedes genus of mosquitoes is responsible for the transmission of West Nile virus to the humans.
- 3. Around 80% of West Nile virus infections in humans are asymptomatic.
- 4. There is no human-to-human transmission of the virus.

How many of the statements given above are correct?

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

Q.16) Which one of the following brain's regions is responsible for regulating body temperature and can be affected by schizophrenia and some antipsychotic medications?

- a) Hypothalamus
- b) Hippocampus
- c) Amygdala
- d) Pituitary gland

Q.17) The 'Widal test' is used to detect antibodies against which one of the following groups of bacteria?

- a) Escherichia coli
- b) Salmonella
- c) Streptococcus
- d) Staphylococcus



Q.8) Consider the following statements:

- 1. The Indian government does not permit vaccination against avian influenza.
- 2. Avian influenza can affect mammals like cows and goats.
- 3. Some strains of avian influenza have a high mortality rate among humans.

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.19) Which of these phenomena is likely to occur in regions that do not usually encounter a significant Solar Storm?

- a) Tornadoes
- b) Intense auroras
- c) Heatwaves
- d) Snowstorms

Q.20) Which one of the following best describes the term 'Protein Folding'?

- a) The process by which proteins are broken down and lose their genetic functions.
- b) The process by which a protein assumes its functional three-dimensional structure.
- c) The process by which proteins break down into smaller peptide chains.
- d) The process by which proteins are combined to form more complex protein structures.

Q.21) Consider the following statements:

- 1. Caenorhabditis elegans was the first multicellular organism to have its genome fully sequenced and its neural circuitry completely mapped.
- 2. Small RNA molecules (sRNAs) are non-coding RNAs known for their ability to provide structural support for ribosomes during translation.

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.22) Consider the following statements:

- 1. Exoplanet is a planet that is present within our Solar System.
- 2. A binary star system consists of a star with a binary planetary system.

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.23) With reference to the NASA-ISRO Synthetic Aperture Radar (NISAR) satellite, consider the following statements:

- 1. NISAR will be the first radar imaging satellite to use dual frequencies for observing Earth's surface.
- 2. NISAR will cover the entire Earth every 12 days.
- 3. S-band Synthetic Aperture Radar (SAR) of the satellite is capable of penetrating in depth through vegetation, snow, and soil to capture images of surface changes and movements.

How many of the statements given above are correct?

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



Q.24) Consider the following statements:

- 1. Aurorae are produced through interactions between the Earth's magnetic field and charged particles from the Sun.
- 2. The formation of the aurora is enhanced by an increase in Earth's atmospheric pressure.
- 3. Center of Excellence in Space Sciences India (CESSI) is the only Indian institute that provides timely updates on space weather.
- 4. Sunspots are areas on the Sun's surface that appear dark because they are hotter than the surrounding areas.
- 5. Aditya-L1 satellite provide uninterrupted observations of solar phenomena.

How many of the statements given above are correct?

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

Q.25) During which of the following phases of the 11-year solar cycle are solar activities, such as sunspots and solar flares, most prominent?

- a) Solar minimum
- b) Solar maximum
- c) Solar equilibrium
- d) Solar transition

Q.26) Consider the following statements:

- 1. Extrapulmonary tuberculosis (EPTB) refers to tuberculosis infections that occur outside of the lungs.
- 2. India accounts for 50% of the global TB burden.

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.27) Which one of the following best describes the benefits to companies and regulators for participating in a regulatory sandbox?

- a) Companies and regulators receive benefits mostly in the form of tax exemptions and financial incentives that support long-term operating costs.
- b) The main advantage for companies is the ability to permanently avoid any regulatory compliance, while regulators benefit from reduced workload and oversight responsibilities.
- c) Businesses can test innovations in a controlled environment to gather data without the burden of regulatory compliance, while regulators gain insights into emerging technologies to form future regulations.
- d) The only benefit for businesses is immediate market access, while regulators benefit solely from increased bureaucratic control over innovative industries.

Q.28) The Indian Army is procuring another set of Russian Igla-S very short-range air defence systems (VSHORAD) system. Which one of the following types of missile system is the Igla-S classified as?

- a) Surface-to-surface missile
- b) Surface-to-air missile
- c) Air-to-air missile
- d) Man-portable air-defense missile system (MANPADS)



Q.29) Genome-Wide Association Studies (GWAS) involve analyzing vast amounts of genetic data. Which one of the following is the primary objective of a GWAS?

- a) Sequence the entire genome of an individual
- b) Identify genetic variants associated with a specific trait or disease.
- c) Analyze how genes interact with environmental factors to influence health.
- d) Modify genes to treat or cure genetic diseases.

Q.30) Consider the following statements:

- 1. Globally, hysterectomy is one of the most frequently conducted surgeries among women.
- 2. The prevalence of hysterectomy in India is more in the eastern region.

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

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

Q.31) Consider the following statements:

- 1. Kerala is endemic for the West Nile virus.
- 2. The possibility of West Nile Fever (WNF) is considered only when patients exhibit Acute Encephalitis Syndrome (AES).
- 3. The principal vector of WNF is Musca flies.

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

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

Q.32) It is a method of preserving food by exposing it to ionizing radiation, using gamma rays, x-rays, or electron beams to eliminate harmful bacteria and extend shelf life. Which one of the following methods is described above?

- a) Pasteurization
- b) High-Pressure Processing (HPP)
- c) Irradiation
- d) Canning

Q.33) Gram-negative bacteria are often more resistant to antibiotics compared to Gram-positive bacteria. Which one of the following best explains the reasons behind this?

- a) Gram-negative bacteria lack a cell wall
- b) The outer membrane of Gram-negative bacteria acts as a barrier
- c) Gram-negative bacteria have a thicker peptidoglycan layer
- d) Gram-negative bacteria can rapidly reproduce

Q.34) In which one of the following diseases is 'Synuclein alpha (SNCA)' known to be involved?

- a) Alzheimer's disease
- b) Multiple sclerosis
- c) Parkinson's disease
- d) Huntington's disease



Q.35) Consider the following statements:

Statement-I: Hydrogen was formed through stellar nucleosynthesis.

Statement-II: Stellar nucleosynthesis is the process by which stars create elements within their cores through nuclear fusion.

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.36) Consider the following statements:

- 1. Polar Radiant Energy in the Far-InfraRed Experiment (PREFIRE) mission by NASA is aimed at filling the knowledge gap about the Arctic and Antarctic.
- 2. PREFIRE is composed of two small CubeSats outfitted with specialized miniature heat sensors.

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

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

Q.37) Consider the following statements in respect of Integrated Theatre Commands (ITCs):

- 1. It will allow for faster decision-making and coordinated responses to security threats.
- 2. Each ITC will be headed by a two-star officer from any of the three services.
- 3. The establishment of ITCs is a completely new concept for the Indian military.
- 4. Naresh Chandra Committee recommended the creation of ITCs in India.

How many of the statements given above are correct?

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

Q.38) The Central Equipment Identity Register (CEIR) is a database aimed at curbing which one of the following issues in India?

- a) Malfunctioning of electronic devices
- b) Counterfeiting of mobile phones and other electronic devices
- c) Unauthorized modification of electronic devices
- d) Data breaches on electronic devices

Q.39) Consider the following statements:

- 1. Males have two X chromosomes, while females have one X and one Y chromosome.
- 2. The X chromosome is significant for determining gender as well as diseases.
- 3. X Chromosome Inactivation (XCI) is a process that occurs in female mammals to achieve dosage compensation for X-linked genes.

How many of the statements given above are correct?

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



Q.40) Consider the following:

- 1. Reduced noise pollution
- 2. Lower operational costs
- 3. Increased traffic congestion
- 4. On-demand transportation

How many of the above are the benefits of Electric Vertical Take-off and Landing (eVTOL) aircraft?

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

Q.41) Consider the following statements:

- 1. AI agents are advanced AI systems that interact in real-time with humans using multiple modes of communication such as text, voice, and images.
- 2. AI agents can assist medical professionals by providing diagnostic support and real-time patient monitoring.

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.42) Consider the following statements:

- 1. In astronomy, the 'transient' refers to a celestial object with a fixed position and constant brightness.
- 2. Active Galactic Nuclei (AGN) are found at the centers of massive galaxies, where supermassive black holes consume surrounding matter.

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

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

Q.43) Consider the following statements:

- 1. Copper turns to liquid when heated and can be shaped to the desired shape.
- 2. The production of steel is the result of repeated heating and cooling of iron with controlled carbon removal.
- 3. Strain is defined as the material's ability to resist deformation.

How many of the statements given above are correct?

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

Q.44) Consider the following statements:

- 1. Microcephaly is a condition characterized by a significantly smaller head size in infants compared to normal.
- 2. The SASS6 gene is crucial for the formation of centrioles, which are essential for cell division and proper brain development.

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) RudraM-II is a type of:

- a) Ballistic Missile
- b) Cruise Missile
- c) Anti-Tank Missile
- d) Anti-Radiation Missile

Q.46) With reference to the Agnibaan SOrTeD (SubOrbital Technological Demonstrator) rocket, consider the following statements:

- 1. It is India's first semi-cryogenic engine-powered rocket that was entirely designed and manufactured indigenously.
- 2. It is the world's first single-piece 3D-printed semi-cryogenic rocket engine.
- 3. It is powered by liquid hydrogen and liquid oxygen.

How many of the statements given above are correct?

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

Q.47) Consider the following statements:

- 1. I-STEM initiative aims to promote international collaboration in science and technology.
- 2. One Nation, One Subscription (ONOS) proposes a centralized model of subscription to scientific journals, making them universally available to all publicly funded institutions.

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

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

Q.48) Consider the following statements:

- 1. Crohn's disease and ulcerative colitis are the two main types of Inflammatory Bowel Disease (IBD).
- 2. IBD is a chronic autoimmune condition where the body's immune system mistakenly attacks cells in the gut, causing ulcers in the mucosa.
- 3. Children with IBD may not absorb macro and micronutrients properly.

How many of the statements given above are correct?

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

Q.49) Consider the following statements:

- 1. India has the highest number of tobacco consumers in the world.
- 2. Tobacco cultivation causes deforestation.
- 3. The WHO's Framework Convention on Tobacco Control (FCTC) aims to increase government revenue from tobacco taxes.

How many of the statements given above are correct?

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



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

Answer Key

Answers & Explanations

1. Correct Answer is (C)

- Statements 1, 3 and 4 are correct. The Expanded Programme on Immunization (EPI) was launched by the World Health Organization (WHO) in 1974 to increase global vaccination coverage against six major preventable diseases (Diphtheria, Pertussis, Tetanus, Polio, Measles, Tuberculosis (TB)). However, now it has been expanded over 13 diseases. India launched its own indigenous immunization program, the Universal Immunization Programme (UIP), in 1985, drawing inspiration from the EPI. The UIP aims to protect children and mothers against various preventable diseases by providing free vaccines. Herd immunity, achieved when a significant proportion of a population is vaccinated, plays a crucial role in the success of EPI programs.
- Statement 2 is incorrect. While EPI has been successful in increasing immunization coverage and significantly reducing the incidence of measles, the disease has not been eradicated globally. The only human infectious disease that has been successfully eradicated globally is smallpox.

Source: <u>The Hindu</u>

2. Correct Answer is (C)

• Statements 1 and 2 are correct. India's Defence Research and Development Organisation (DRDO) has indeed designed a two-tier Ballistic Missile Defence (BMD) system. This system is intended to track and destroy nuclear and other ballistic missiles both inside and outside the Earth's atmosphere. The two-tier system consists of the Prithvi Air Defence (PAD) missile for high-altitude interception and the Advanced Air Defence (AAD) missile for low-altitude interception. India is also developing its own long-range surface-to-air missile (LRSAM) system under Project Kusha. The LRSAM, also known as the Barak 8 missile system, is a joint project between India and Israel, with the involvement of DRDO and Israel Aerospace Industries (IAI). The LRSAM is designed to defend against airborne threats like aircraft, drones, and missiles.

Source: The Times of India

3. Correct Answer is (C)

- **Production of Rocket Fuel:** Water ice can be split into hydrogen and oxygen through a process called electrolysis. These components are key ingredients in rocket fuel, making the production of rocket fuel a viable use of lunar water ice.
- **Cooling Equipment:** Water has excellent thermal properties and can be used in systems designed to cool equipment, especially in harsh lunar conditions where temperature regulation is crucial for the survival of instruments and habitats.



- **Construction of Buildings:** Water ice can be used as a binder in the construction of buildings on the Moon. By mixing lunar regolith (moon dust) with water, it's possible to create a concrete-like material for building structures, providing shelter and protection against the lunar environment.
- **Note:** A recent study indicates that the northern polar region of the moon harbors twice the amount of water ice compared to the southern polar region. The study supports the hypothesis that the primary source of sub-surface water ice at the lunar poles is out-gassing associated with volcanic activity during the Imbrian period.

Source: <u>The Hindu</u>

4. Correct Answer is (A)

- Statements 1 and 2 are correct. The moon orbits the Earth roughly once a month. This lunar orbit takes approximately 29.53 days to complete, which is the basis for the lunar month in various calendar systems. Antares is the brightest star in the constellation of Scorpius. It is a red supergiant star and one of the largest and most luminous stars in our galaxy.
- Statement 3 is incorrect. Occultation is an astronomical term that refers to a situation when a smaller celestial body passes in front of a larger one, temporarily hiding the larger object from view.

Source: <u>The Hindu</u>

5. Correct Answer is (A)

- Statements 1 is correct. Quarks are fundamental particles that make up protons and neutrons. They are considered elementary particles and are key components of the Standard Model of particle physics. Protons and neutrons are common examples of three-quark hadrons, which are composite particles made up of three quarks bound together by the strong nuclear force.
- Statement 2 is incorrect. Quarks do not have the capability to exist independently. They are always bound together by the strong nuclear force within hadrons (e.g., protons and neutrons). The strong nuclear force prevents quarks from being observed in isolation, a phenomenon known as quark confinement.

Source: <u>The Hindu</u>

6. Correct Answer is (A)

• Liquid nitrogen is widely used in food processing and preservation due to its extremely low temperature of -196°C (-321°F). Its rapid freezing capability helps maintain the quality of food products by minimizing ice crystal formation, preserving texture, and reducing the chances of microbial growth. Liquid nitrogen's extreme cold can cause severe damage to skin, mucous membranes, and internal organs if mishandled or ingested. Liquid nitrogen has been used in medical settings since the 1960s, especially in the treatment of benign pre-cancers and cancers. This process, known as cryotherapy, uses temperatures as low as -196 degrees Celsius to freeze and destroy cancer cells. It also increases the food shelf life acting as a preservative.

Source: <u>The Hindu</u>

7. Correct Answer is (C)

• Standard Essential Patents are patents that are essential to implement a specific industry standard or technology. They play a vital role in promoting innovation and ensuring compatibility among various devices and systems. By licensing these patents under fair, reasonable, and non-discriminatory (FRAND) terms, companies can develop products that adhere to common standards, leading to greater interoperability and a more efficient technological ecosystem. This, in turn, benefits both companies and consumers by fostering competition, encouraging innovation, and offering a wider range of compatible products.

Source: The Hindu

8. Correct Answer is (C)



• Ethylene oxide is used for the sterilization of medical devices and equipment that cannot withstand high-temperature sterilization methods. It can be used as a fumigant for spices, nuts, and other food products to control microbial growth and maintain product quality. In agriculture, ethylene oxide is used as a pesticide and fumigant to control pests and protect crops. However, ethylene oxide is not typically used in household electrical appliances. Its primary uses are in sterilization, food processing, and agricultural applications.

Source: <u>The Hindu</u>

9. Correct Answer is (B)

• Thrombocytopenia Thrombosis Syndrome (TTS) is a rare blood disorder characterized by low platelet counts (thrombocytopenia) and blood clots (thrombosis). Platelets, also known as thrombocytes, are small blood cells that play a crucial role in the blood clotting process. In TTS, the body's immune system produces antibodies that mistakenly attack and destroy platelets, leading to a reduced platelet count.

Source: Forum IAS

10. Correct Answer is (D)

• Balanced fertilization refers to the process of supplying essential nutrients to crops in the right proportion. The primary nutrients in balanced fertilization are Nitrogen (N), Phosphorus (P), and Potassium (K). These three nutrients are essential for plant growth and development and are required in relatively large quantities compared to other nutrients. They are often represented by the acronym NPK. Secondary nutrients include Sulfur (S), calcium, and magnesium. Micronutrients include iron, zinc, copper, manganese, boron, and molybdenum.

Source: Forum IAS

11. Correct Answer is (D)

• The Moon is tidally locked with Earth, which means that it rotates on its axis at the same rate at which it orbits our planet. As a result, the same side of the Moon always faces Earth, while the far side remains unseen from our perspective. It is important to note that the far side of the Moon does receive sunlight and experiences day and night cycles, just like the near side. However, due to the tidal locking, it is never visible from Earth without the aid of spacecraft or lunar orbiters.

Source: <u>The Hindu</u>

12. Correct Answer is (B)

• Project-75I, also called P75(I), is an initiative started by the Indian Navy to get new submarines with modern features like Air-Independent Propulsion (AIP) systems. The goal is to improve the Navy's undersea abilities and support local submarine-building skills through sharing technology and working with foreign allies.

Source: <u>The Hindu</u>

13. Correct Answer is (C)

- Statements 1 and 3 are correct. In India, CRC is the seventh most common type of cancer in India, with cases increasing by 20% from 2004 to 2014. This indicates that CRC is a significant health concern in India. Fusobacterium nucleatum has been shown to play a role in colorectal cancer (CRC) by helping cancer cells escape the immune system and spread within the gut. Studies have indicated that Fusobacterium nucleatum can modulate the tumor microenvironment, diminish adaptive immunity against colorectal cancers.
- Statement 2 is incorrect. Fusobacterium nucleatum is not commonly found in the human brain. It is a gram-negative anaerobic bacterium that is indigenous to the human oral cavity and can also be found in the gastrointestinal tract.

Source: <u>The Hindu</u>



14. Correct Answer is (C)

• Magnetic Resonance Imaging (MRI) is a non-invasive imaging technique that utilizes the principles of nuclear magnetic resonance. It works by applying a strong magnetic field to align the nuclear spins of hydrogen atoms (mainly from water and fat) in the body. Subsequently, a radiofrequency pulse is used to excite the atoms, causing them to emit energy signals as they return to their original state. The scanner detects these signals and constructs detailed cross-sectional images of the scanned body part.

Source: <u>The Hindu</u>

15. Correct Answer is (C)

- Statements 1, 3 and 4 are correct. West Nile virus primarily infects birds, which are the main reservoirs for the virus. Mosquitoes become infected when they feed on infected birds and then transmit the virus to other animals, including humans. Approximately 80% of West Nile virus infections in humans are asymptomatic, meaning most people infected with the virus do not show symptoms. The West Nile virus is primarily transmitted to humans through the bite of an infected mosquito. The virus cannot be spread through casual contact or through the airborne route. However, in a few cases, it can be transmitted through blood transfusions, organ transplants, or from mother to child during pregnancy or breastfeeding.
- Statement 2 is incorrect. The primary vectors for the transmission of West Nile virus to humans are mosquitoes of the *Culex* genus.

Source: <u>The Hindu</u>

16. Correct Answer is (A)

• The hypothalamus is the brain region responsible for regulating various physiological processes, including body temperature. It serves as a critical link between the nervous system and the endocrine system. Both schizophrenia and certain antipsychotic medications can impact the functioning of the hypothalamus, leading to temperature dysregulation and other related issues.

Source: <u>The Hindu</u>

17. Correct Answer is (B)

• The Widal test is a rapid blood test commonly used in India to diagnose typhoid. Typhoid is caused by Salmonella typhi and related bacteria, spreading through contaminated food and water. Therefore, the Widal test is used to detect antibodies against Salmonella bacteria, particularly Salmonella typhi and Salmonella paratyphi, which are the causative agents of typhoid and paratyphoid fever, respectively.

Source: <u>The Hindu</u>

18. Correct Answer is (D)

• Statements 1, 2 and 3 are correct. The Indian government does not permit vaccination against avian influenza, also known as bird flu. This is because vaccination can mask the presence of the virus in birds, leading to difficulties in differentiating between infected and vaccinated birds. Instead, the government focuses on culling infected birds and implementing strict biosecurity measures to control the spread of avian influenza. While avian influenza primarily affects birds, it can also infect mammals, including cows and goats. The virus can spread to mammals through direct contact with infected birds or contaminated surfaces. Some strains of avian influenza, such as H5N1, have been associated with high mortality rates in humans. The overall number of human cases and deaths is relatively low, but the high mortality rate among those infected is a cause for concern.

Source: <u>The Hindu</u>

19. Correct Answer is (B)



• One of the effects of a solar storm striking Earth is the creation of the "northern lights" or auroras, which are seen in the regions around the Arctic Circle. During significant solar storms, these auroras can be observed much farther from the poles than usual, in regions that do not typically encounter them.

Source: <u>NewsonAIR</u>

20. Correct Answer is (B)

• Protein folding refers to the process in which a polypeptide chain (a linear chain of amino acids) transforms into a functional three-dimensional structure, which is essential for its biological activity. This three-dimensional structure is determined by the specific sequence of amino acids in the protein and the interactions between them, as well as interactions with the surrounding environment. Protein folding plays a crucial role in protein function, as it allows the protein to adopt a specific conformation that enables it to perform its designated tasks within cells.

Source: <u>The Hindu</u>

21. Correct Answer is (A)

- Statement 1 is correct. Caenorhabditis elegans was the first multicellular organism to have its entire genome sequenced, which was completed in 1998. Additionally, it is also the only organism to have its neural circuitry completely mapped, making it an invaluable model system for studying neuroscience, developmental biology, and genetics.
- Statement 2 is incorrect. Small RNA molecules, such as microRNAs (miRNAs), small interfering RNAs (siRNAs), function in regulating gene expression at the post-transcriptional level, by affecting mRNA stability and translation.

Source: <u>The Hindu</u>

22. Correct Answer is (D)

• Statements 1 and 2 are incorrect. An exoplanet, also known as an extrasolar planet, is a planet that orbits a star other than the Sun and is therefore not within our Solar System. A binary star system consists of two stars that are gravitationally bound to each other and orbit a common center of mass.

Source: <u>The Hindu</u>

23. Correct Answer is (B)

- Statements 1 and 2 are correct. The NASA-ISRO Synthetic Aperture Radar (NISAR) satellite is a joint venture between NASA and ISRO, designed to observe Earth's surface with high precision. It features dual-frequency radars: the L-band (provided by NASA) and the S-band (developed by ISRO). NISAR will be the first radar imaging satellite to utilize dual frequencies, specifically the L-band and S-band, to observe Earth's surface. This dual-frequency approach allows for detailed observations of Earth's surface, including areas covered by dense vegetation or cloud cover. NISAR satellite will map nearly the entire Earth's land and ice surfaces every 12 days. It will scan the Earth twice every 12 days in ascending and descending passes, and can operate day and night, even through clouds.
- Statement 3 is incorrect. While the S-band SAR on NISAR can penetrate light vegetation and is useful for certain applications like monitoring soil moisture and slight vegetation, it does not have the capability to penetrate through vegetation, snow, and soil as deeply as the L-band SAR. The L-band, with its longer wavelength, is more effective for deeper penetration through these materials.



Aspect	L-Band SAR	S-Band SAR		
Frequency Range	1 to 2 GHz	2 to 4 GHz		
Wavelength	15 to 30 cm	7.5 to 15 cm		
	High (penetrates	Moderate (limited		
Penetration	vegetation, soil, snow)	penetration)		
Resolution	Lower resolution	Higher resolution		
	Better for large-scale	Better for detailed surface		
Surface Detail	observations	observations		
	Effective for monitoring	Less effective for tectonic		
Tectonic Monitoring	land deformation	monitoring		
	Less affected by rain and	More susceptible to		
Atmospheric Impact	atmospheric conditions	attenuation by rain		

Source: <u>The Hindu</u>

24. Correct Answer is (B)

- Statements 1, 3 and 5 are correct. Aurorae (northern and southern lights) occur when charged particles from the Sun interact with the Earth's magnetic field, and the resulting energy is released as light. The Center of Excellence in Space Sciences India (CESSI) is the primary and the only institute in the country that offers up-to-date information on space weather, including solar activity and its impact on Earth. Aditya-L1 is India's first solar mission, designed to observe the Sun's corona, solar wind, and other solar phenomena from a point in space known as the L1. The mission aims to provide continuous and uninterrupted observations of the Sun's behavior, which will enhance our understanding of space weather and its impacts on Earth.
- Statements 2 and 4 are incorrect. The formation of aurorae is not enhanced by an increase in Earth's atmospheric pressure. When solar eruptions release charged particles, they can get trapped in Earth's magnetic field, causing geomagnetic storms. These storms interact with atoms in the upper atmosphere, resulting in the creation of aurorae. Sunspots are areas on the Sun's surface that appear dark because they are cooler than the surrounding areas, not hotter. These regions have intense magnetic activity, which inhibits convection and results in a lower temperature compared to their surroundings. Sunspots are associated with magnetic activity, which can influence solar emissions and lead to irregularities such as solar flares and coronal mass ejections. Sunspots can last for several weeks to a few months, depending on their size and the intensity of the magnetic activity around them. Sunspots are most prevalent during the solar maximum.

Source: <u>The Hindu</u>

25. Correct Answer is (B)

• Solar activities, such as sunspots and solar flares, are most prominent during the solar maximum phase of the 11-year solar cycle. This is the period when the Sun's magnetic field is most active, and the number of sunspots, solar flares, and other solar phenomena reach their peak levels. The solar maximum phase typically lasts for several years, and it is followed by a gradual decrease in solar activity during the declining phase, which ultimately leads to the solar minimum phase when the Sun is relatively calm. The 11-year solar cycle, also known as the solar magnetic activity cycle, sunspot cycle, or Schwabe cycle, is a cycle of roughly 11 years where the Sun's magnetic field and overall activity level fluctuate between a period of minimum activity to a period of maximum activity, and then back to minimum again. Over this cycle, the Sun's magnetic field undergoes a complete reversal. The north and south magnetic poles swap places. The number and size of sunspots increase significantly.

Source: <u>The Hindu</u>



26. Correct Answer is (A)

- Statement 1 is correct. Extrapulmonary tuberculosis (EPTB) refers to tuberculosis infections that occur outside of the lungs, affecting other organs such as the lymph nodes, brain, gut, and eyes.
- Statement 2 is incorrect. India accounts for a significant portion of the global TB burden. As of the latest reports, India accounts for approximately 27% of the global TB burden.

Source: <u>The Hindu</u>

27. Correct Answer is (C)

• Regulatory sandboxes provide a controlled environment where businesses can test innovations and gather valuable data without the full burden of regulatory compliance. This setup allows companies to refine their products or services based on real-world feedback and performance. Moreover, regulators benefit from gaining firsthand insights into emerging technologies, which can inform the development of future regulations that are both effective and conducive for innovation. Regulatory sandboxes are being used in the context of developing AI.

Source: <u>The Hindu</u>

28. Correct Answer is (D)

• The Igla-S is a Russian-made man-portable air-defense missile system (MANPADS). It is designed to engage and destroy low-flying aircraft, helicopters, and unmanned aerial vehicles (UAVs).

Source: <u>The Hindu</u>

29. Correct Answer is (B)

• The primary objective of a Genome-Wide Association Study (GWAS) is to identify genetic variants, such as single nucleotide polymorphisms (SNPs), that are associated with a specific trait, condition, or disease. It involves rapidly scanning markers across the complete sets of DNA, or genomes, of many people to find genetic variations associated with a particular disease.

Source: <u>The Hindu</u>

30. Correct Answer is (A)

- Statement 1 is correct. Hysterectomy is performed to alleviate symptoms of gynecological disorders such as irregular bleeding, menorrhagia, pelvic pain, and bodily discomfort. It can also reduce anxiety and depression, thereby enhancing the quality of life for many women. Globally, hysterectomy is one of the most frequently conducted surgeries among women.
- Statement 2 is incorrect. The overall prevalence of hysterectomy in India is 11.5%, with the highest rates in the southern (18.2%) and western (12.7%) regions. Andhra Pradesh has the highest prevalence rate at 63 per 1,000 women, followed by Telangana (55 per 1,000), Karnataka (29 per 1,000), and Punjab (23 per 1,000).

Source: <u>The Hindu</u>

31. Correct Answer is (B)

- Statement 1 is correct. Kerala has been endemic for the West Nile virus (WNV) for at least two decades.
- Statements 2 and 3 are incorrect. Although Acute Encephalitis Syndrome (AES) is an important factor of WNV infection, the possibility of WNF is also considered in patients with milder symptoms such as fever, headache, body aches and fatigue. The principal vectors of WNV are mosquitoes, primarily those belonging to the Culex genus.

Source: <u>The Hindu</u>

32. Correct Answer is (C)

 Food irradiation involves exposing food items to ionizing radiation to kill harmful microorganisms and extend the shelf life of food products. The process is used to enhance food safety and reduce Created with love • by ForumIAS- the knowledge network for civil services. Visit academy.forumias.com for our mentor based courses.



the risk of foodborne illnesses. It is important to note that irradiation does not make the food radioactive; rather, it is a safe and effective method of food preservation. India is piloting irradiation to extend the shelf life of onions and reduce post-harvest losses.

Source: Forum IAS

33. Correct Answer is (B)

• Gram-negative bacteria possess an outer membrane that contains lipopolysaccharides, which act as a physical barrier to many antibiotics. This outer membrane prevents the entry of antibiotics into the bacterial cell, making Gram-negative bacteria generally more resistant to antibiotics compared to Gram-positive bacteria.

Source: <u>The Hindu</u>

34. Correct Answer is (C)

• Alpha-synuclein (SNCA) is a protein that has been particularly implicated in Parkinson's disease, a neurodegenerative disorder that affects movement, often causing tremors and stiffness. In Parkinson's disease, abnormal accumulation of alpha-synuclein forms protein clumps called Lewy bodies, which are found in the brains of affected individuals. These clumps are thought to contribute to the loss of dopamine-producing neurons in a region of the brain called the substantia nigra, leading to the motor symptoms associated with the disease.

Source: <u>The Hindu</u>

35. Correct Answer is (D)

- Statement-I is incorrect. Hydrogen was formed in the initial aftermath of the Big Bang, not through stellar nucleosynthesis.
- Statement-II is correct. Stellar nucleosynthesis is the process through which stars create elements within their cores. Stars have extremely high pressures and temperatures in their cores. For example, the Sun's core temperature is about 15 million degrees Celsius. These conditions allow atomic nuclei to undergo nuclear fusion.

Source: <u>The Hindu</u>

36. Correct Answer is (C)

• Statements 1 and 2 are correct. The primary goal of the PREFIRE mission is to improve our understanding of the energy balance in the Arctic and Antarctic regions by measuring heat emissions from these polar areas. This will help fill knowledge gaps in climate science and provide valuable insights into how Earth's polar regions contribute to the global climate system. The PREFIRE mission consists of two small CubeSats, each equipped with miniature heat sensors called bolometers. These CubeSats will orbit Earth and measure the heat emitted from the polar regions in the far-infrared portion of the electromagnetic spectrum, which is crucial for understanding energy exchange between Earth's surface and the atmosphere in these areas.

Source: Forum IAS

37. Correct Answer is (A)

- Statement 1 is correct. Integrated Theatre Commands are designed to unify the command of the three services (Army, Navy, and Air Force) under a single commander, which facilitates faster decision-making and coordinated responses to security threats by avoiding the need for coordination among multiple service-specific commands.
- Statements 2, 3 and 4 are incorrect. The proposed structure for ITCs suggests that they will be headed by four-star officers, equivalent to the service chiefs, to ensure they have the requisite authority and command over the integrated resources of the three services. The concept of jointness and integrated commands is not entirely new to the Indian military. The Andaman and Nicobar Command (ANC) and the Strategic Forces Command (SFC) are examples of existing unified commands in India. However, the proposed ITCs will expand this concept to cover larger Created with love ♥ by ForumIAS- the knowledge network for civil services.

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geographical areas and include all three services. It was the Shekatkar committee, which recommended the creation of the post of Chief of Defence Staff (CDS) and theatre commands.

Source: <u>The Hindu</u>

38. Correct Answer is (B)

• The CEIR system is designed to identify and block stolen or illegal mobile phones across networks, thereby preventing the use of counterfeit and cloned mobile devices. It helps in tracking lost or stolen mobile phones and ensures that blacklisted devices cannot be used on any network in India. The CEIR portal was developed by the Department of Telecommunications.

Source: AIR

39. Correct Answer is (B)

- Statement 1 is incorrect. Males have one X and one Y chromosome, while females have two X chromosomes. This chromosomal difference between males and females is the basis of sex determination in mammals.
- Statements 2 and 3 are correct. The X chromosome is significant not only for determining sex but also for its role in various biological functions and disease susceptibilities. The human X chromosome encodes around 800 genes, which are crucial for numerous cellular processes. Loss of function in these genes can lead to a variety of genetic diseases. X Chromosome Inactivation (XCI) is a process occurring in female mammals to balance the gene expression levels of X-linked genes between the sexes. One of the two X chromosomes in female cells is transcriptionally silenced to achieve this dosage compensation.

Source: <u>The Hindu</u>

40. Correct Answer is (C)

• An eVTOL (electric vertical take-off and landing) aircraft is a type of VTOL (vertical take-off and landing) aircraft that utilizes electric power for hovering, takeoff, and vertical landing. These aircraft represent a significant advancement in aerospace technology. It is designed primarily for low-altitude urban air mobility. Increased traffic congestion is not a benefit but rather a potential concern associated with eVTOL operations, especially in urban areas.

Source: Forum IAS

41. Correct Answer is (C)

• Statements 1 and 2 are correct. AI agents, such as those powered by OpenAI's GPT-40 and Google's Project Astra, are capable of engaging in real-time, multimodal interactions with humans, including text, voice, and images. AI agents can provide real-time analysis, diagnostic support, and patient monitoring, assisting medical professionals in various healthcare tasks.

Source: Forum IAS

42. Correct Answer is (B)

- Statement 1 is incorrect. A transient in astronomy is a phenomenon that changes brightness or position over time, such as a supernova explosion, a variable star, or a moving asteroid. Transient celestial objects can appear and disappear, or their brightness can change rapidly.
- Statement 2 is correct. Active Galactic Nuclei (AGN) are found at the centers of massive galaxies, where supermassive black holes actively accrete matter, emitting significant amounts of energy across the electromagnetic spectrum. Active Galactic Nuclei (AGN) can be considered transients in some aspects. While they exhibit long-term activity, their luminosity can vary over time. Other types of transients are:
- Supernovae They occur when the outer layers of large stars explode while their cores implode due to the exhaustion of fusible elements.
- Fast Radio Bursts (FRBs) They can emit more than ten times the energy of the Sun in just a few milliseconds.



Source: <u>The Hindu</u>

43. Correct Answer is (B)

- Statements 1 and 2 are correct. Copper melts at a temperature of around 1085°C and once it is in a liquid state, it can be cast into molds to form desired shapes. The production of steel involves processes such as basic oxygen steelmaking (BOS) and electric arc furnace (EAF) methods, where iron is repeatedly heated and cooled, and carbon content is controlled to produce steel.
- Statement 3 is incorrect. Strain is defined as the deformation or change in shape of a material in response to an applied stress.

Source: <u>The Hindu</u>

44. Correct Answer is (C)

• Statements 1 and 2 are correct. Microcephaly is defined as a condition where an infant's head is significantly smaller than expected for their age and sex. This can be due to the brain not developing properly either during pregnancy or after birth. It is often associated with various neurological impairments and developmental delays. The SASS6 gene encodes a protein that is necessary for centriole duplication and proper formation. Centrioles play a critical role in cell division by organizing the mitotic spindle and ensuring accurate chromosome segregation. Mutations in the SASS6 gene can lead to defects in centriole formation, which are associated with conditions like primary microcephaly, highlighting its importance in brain development.

Source: <u>The Hindu</u>

45. Correct Answer is (D)

• The RudraM-II is an indigenously developed air-to-surface anti-radiation missile designed to target enemy ground radars and communication stations in Suppression of Enemy Air Defence (SEAD) missions.

Source: <u>The Hindu</u>

46. Correct Answer is (B)

- Statements 1 and 2 are correct. The Agnibaan SOrTeD is India's first semi-cryogenic enginepowered rocket that was entirely designed and manufactured indigenously by Agnikul Cosmos. The Agnilet engine used in the Agnibaan SOrTeD is the world's first single-piece 3Dprinted semi-cryogenic rocket engine. It was also launched from India's first privately developed launchpad called 'Dhanush' established by Agnikul at Sriharikota. Agnibaan is a two-stage rocket with a capacity to carry up to 300 kg to a height of 700 km.
- Statement 3 is incorrect. The Agnibaan SOrTeD is powered by a semi-cryogenic engine that uses liquid oxygen (LOX) and kerosene, not liquid hydrogen and liquid oxygen.

Source: AIR

47. Correct Answer is (B)

- Statement 1 is incorrect. The primary objective of the I-STEM (Indian Science, Technology, and Engineering Facilities Map) initiative is to create a database of R&D resources and facilitate their access to researchers within India.
- Statement 2 is correct. The ONOS initiative proposes a centralized negotiation and payment by the Government of India to journal publishers, allowing all individuals and institutions in the country to access those journals without additional cost.

Source: <u>The Hindu</u>

48. Correct Answer is (C)



from the mouth to the anus, while ulcerative colitis is limited to the colon or large intestine. While the exact cause of IBD is unknown, it's believed to involve a combination of genetic and environmental factors. In some cases, the immune system gets dysregulated and starts attacking healthy tissues in the gut, leading to inflammation and ulcers. This primarily affects the inner lining (mucosa) of the affected area. Chronic inflammation in IBD can damage the gut lining and hinder nutrient absorption. This can lead to deficiencies in macro and micronutrients, impacting growth and overall health in children with IBD.

Source: <u>The Hindu</u>

49. Correct Answer is (A)

- Statements 1 and 3 are incorrect. India has the second highest number of tobacco consumers in the world, after China. The WHO's Framework Convention on Tobacco Control (FCTC) aims to reduce both the demand and supply of tobacco through various measures. India is a signatory to the framework.
- Statement 2 is correct. Tobacco cultivation depletes soil nutrients rapidly, necessitating more fertilizers, which further degrade soil quality. Processing 1 kg of tobacco requires 5.4 kg of wood, contributing significantly to deforestation.

Source: <u>The Hindu</u>

