# **Forum** AS

## 10 PM Current Affairs Quiz Compilation

16th to 21st October, 2023

#### **PRELIMS**

## Q.1) Consider the following statements regarding the Indian Pharmacopoeia Commission (IPC):

- 1. It is scientific organization that is responsible for setting and publishing standards for drugs and pharmaceutical products in India.
- 2. It is responsible for enforcing the Drugs and Cosmetics Act, 1940.
- 3. Its standards are legally enforceable in India.

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

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

#### Answer: B

#### Explanation -

**Statements 1 and 3 are correct**. IPC is a scientific organization that is responsible for setting and publishing standards for drugs and pharmaceutical products in India. It is an autonomous institution under the Ministry of Health and Family Welfare, Government of India. IPC standards are legally enforceable in India, and all drugs and pharmaceutical products marketed in India must comply with these standards.

**Statement 2 is incorrect**. The Drugs and Cosmetics Act, 1940, is enforced by the Central Drugs Standard Control Organization (CDSCO).

Source: ForumIAS

## Q.2) With reference to Nilgiri Tahr, sometimes mentioned in the news, consider the following statements:

- 1. They are also referred to as Mountain Monarch.
- 2. They find multiple references in the Puranas.
- 3. It is the only mountain ungulate in southern India.

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

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

#### Answer: D

#### Explanation -

**Statements 1 and 3 are correct**. Nilgiri Tahr is an ungulate endemic to the Western Ghats. It is the only mountain ungulate in southern India amongst the 12 species present in India. It is also the **state animal of Tamil Nadu**. Nilgiri Tahr are known for their gravity defying skills in climbing steep cliffs. Thats why they are called "**Mountain Monarch**".

**Statement 2 is incorrect**. There are multiple references to Nilgiri Tahr in the Sangam Tamil literature. Two epics — **Silappathikaram** and **Sivakasindamani** — mention descriptions of the Nilgiri Tahr and its habitat.





## Q.3) With reference to the United Nations Human Rights Council (UNHRC), consider the following statements:

- 1. Universal Periodic Review is a unique mechanism within the UNHRC designed to assess and review the human rights records of all United Nations member states.
- 2. While the UNHRC can pass resolutions and make recommendations, it does not have the power to impose sanctions on countries that violate human rights.
- 3. UNHRC is only concerned with matters related to political and civil rights.

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

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

#### Answer: C

#### Explanation -

**Statements 1 and 2 are correct**. UNHRC is an intergovernmental body within the United Nations system. It was created in 2006 to replace the United Nations Commission on Human Rights. **Universal Periodic Review** is a unique mechanism within the UNHRC designed to assess and review the human rights records of all United Nations member states. It is composed of 47 member states elected by the United Nations General Assembly. The UNHRC is a political body, and its resolutions and recommendations are **not legally binding**. The UN Security Council is the only UN body that has the power to impose sanctions.

**Statement 3 is incorrect**. The **UNHRC deals with** all human rights, including political and civil rights, as well as economic, social, and cultural rights.

Source: ForumIAS

#### Q.4) In India, what is the role of National AI Portal of India (IndiaAI)?

- 1. It provides news, articles and information about AI and provides insights into the global and Indian AI landscape.
- 2. Its goal is to offer an online library for students, granting them access to books and magazines for reading.
- 3. It aims to facilitate the adoption of AI by businesses and governments in India.
- 4. It guarantees the provision of AI related real-time updates on weather conditions and other geographical phenomena to the user.

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

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

#### **Answer: B**

#### Explanation -

**Statements 1 and 3 are correct**. IndiaAI is the National AI Portal of India. It is a joint initiative by the Ministry of Electronics and IT, National e-Governance Division, and NASSCOM. It provides news, articles and information about AI and provides insights into the global and Indian AI landscape. **It aims to facilitate** the adoption of AI by businesses and governments in India.





Statements 2 and 4 are incorrect. IndiaAI does not guarantee the provision of real-time updates on weather conditions and other geographical phenomena to the user. However, it does provide a number of resources that can be used to access real-time weather updates and other geographical information. For example, IndiaAI provides a link to the website of the India Meteorological Department (IMD), which provides real-time weather updates for India. IndiaAI is a broader initiative that aims to promote and support AI research and development, adoption, and ecosystem building in India. It is not focused on providing access to books and magazines.

Source: ForumIAS

#### Q.5) Consider the following statements:

- 1. They have the freedom to invest up to Rs. 5,000 crores without requiring explicit government approval.
- 2. They have a net profit of more than ₹5,000 crore for three consecutive years.
- 3. They are listed on Indian stock exchange with minimum prescribed public shareholding under SEBI regulations.

How many of the characteristics, mentioned above, are relevant for a Public Sector Enterprise (PSE) having Navratna status?

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

#### Answer: B

Explanation -

Statements 2 and 3 are correct. The Government of India had introduced the 'Navratna' status in 1997. The aim is to identify Central Public Sector Enterprises (CPSEs) that had comparative advantages and to support them in their drive to become global giants. CPSEs fulfilling the following criteria are eligible to be considered for grant of Navaratna status: Having Schedule 'A' and Miniratna Category-1 status, having obtained an 'excellent' or 'very good' MOU rating in three of the last five years, having a composite score of 60 or above in six selected performance indicators such as Net Profit to Net worth, have a net profit of more than ₹5,000 crore for three consecutive years, they should be listed on Indian stock exchange with minimum prescribed public shareholding under SEBI regulations. The minimum prescribed public shareholding is 25%.

Statement 1 is incorrect. Benefits of Getting Navratna Status: Financial independence to invest up to ₹1,000 crore without seeking approval from the central government. Can invest up to 15% of their net worth on a single project or 30% of their net worth in a given year, subject to a cap of ₹1,000 crore.



## Q.6) With reference to Resilient and Inclusive Supply-chain Enhancement (RISE) initiative, consider the following statements:

- 1. The initiative will focus on assisting emerging markets and developing countries in expanding their clean-energy production and increasing their involvement in the minerals industry.
- 2. It aims to reduce the cost of clean energy products for low- and middle-income countries by outsourcing production to countries with lower labor costs.

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

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

#### Answer: A

#### Explanation -

**Statement 1 is correct**. RISE initiative has been launched by **World Bank** in partnership with Japan, Italy, Republic of Korea, Canada and United Kingdom. It aims to deal with two important problems: creating jobs and addressing climate change. **The initiative will focus** on assisting emerging markets and developing countries in expanding their clean-energy production and increasing their involvement in the minerals industry.

**Statement 2 is incorrect**. The RISE initiative is not designed to reduce the cost of clean energy products by outsourcing production to countries with lower labor costs. Instead, the initiative is focused on building up the capacity of developing countries to produce their own clean energy products, by providing them with technical assistance, training, and access to financing.

Source: ForumIAS

## Q.7) In the case that a patient requires treatment with Chimeric Antigen Receptor T cell (CAR-T cell) therapy, which of the following are the likely actions the doctor will take?

- 1. The doctor will give altretamine drugs to the patient to kill cancers.
- 2. The doctor will use genetically engineered T cells to recognize and destroy cancer cells in the patient.
- 3. The doctor will try to damage the DNA of cancer cells, which prevents them from dividing and growing.

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

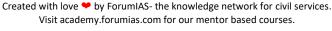
- a) 1 and 2 only
- b) 1 only
- c) 2 and 3 only
- d) 2 only

#### Answer: D

#### Explanation -

**Statements 1** and 3 are incorrect. Altretamine is not used in CAR-T cell therapy. Altretamine is a type of chemotherapy drug that's sometimes used to treat ovarian cancer and other types of cancer. But it's not part of the CAR-T cell therapy process. It is not correct that in CAR-T cell therapy, the doctor will try to damage the DNA of cancer cells, which prevents them from dividing and growing. This is also done mainly in chemotherapy.

**Statement 2 is correct**. CAR-T cell therapy is a type of immunotherapy that uses genetically engineered T cells to fight cancer. **T cells are a type of white blood cell** that plays a key role in





the immune system. They are responsible for finding and destroying infected cells or cancer cells. Drugs are not given in this therapy.

Source: ForumIAS

## Q.8) The Ministry of Electronics and Information Technology (MeitY) has recently released the Draft National Strategy on Robotics. Which of the following sectors does the Draft prioritize for robotics automation?

- 1. Manufacturing
- 2. Agriculture
- 3. Healthcare
- 4. National security

#### Select the correct answer from the code given below:

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

#### Answer: D

**Explanation – The Draft National Strategy on Robotics** is a policy framework that aims to position India as a global leader in robotics by 2030. It was released by the Ministry of Electronics and Information Technology (MeitY). The strategy focuses on strengthening all pillars in the innovation cycle of robotic technology, while also providing a robust institutional framework for ensuring the effective implementation of these interventions. **The strategy has identified**: 1) manufacturing 2) agriculture 3) healthcare and 4) national security as the four core sectors to prioritize robotics automation. The National Strategy on Robotics is proposed to be undertaken as the '**National Robotics Mission**'. This mission will be implemented through the establishment of the Robotics Innovation Unit (RIU) as an institutional framework under IndiaAI.

Source: ForumIAS

## Q.9) With reference to International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), which of the following statements is/are correct?

- 1. It is an international, non-profit, agricultural research organization that conducts research for development in the drylands of Asia and sub-Saharan Africa.
- 2. ICRISAT's mandated crops are maize, rice, and wheat.
- 3. ICRISAT holds a special status as a UN organization in India.

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

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

#### Answer: C

#### Explanation -

**Statements 1 and 3 are correct**. ICRISAT is a non-profit, non-political organization founded in 1972. **Its charter was signed by the FAO and the UNDP**. It is an international, non-profit, agricultural research organization that conducts research for development in the drylands of



Asia and sub-Saharan Africa. ICRISAT holds a special status as a UN organization in India. This makes it eligible for special immunities and tax privileges.

**Statement 2 is incorrect**. The mandated crops of ICRISAT are a set of crops that the organization focuses on in its research and development efforts. These crops are chosen because they are important for food security and livelihoods in the drylands of **Asia and sub-Saharan Africa**, where ICRISAT operates. ICRISAT's mandate crops are chickpea, pigeonpea, groundnut, pearl millet, sorghum, finger millet, teff, and small millets. ICRISAT conducts research on these crops to improve their productivity, quality, and resilience to climate change.

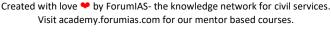
Source: ForumIAS

## Q.10) Which one of the following statements best describes the term "Transformative Constitutionalism", seen in the news recently?

- a) It is a form of constitutionalism that emphasizes tradition, stability, and the preservation of existing social and political structures.
- b) It is a form of constitutionalism that is focused on environmental protection and sustainability.
- c) It is a form of constitutionalism that primarily focuses on democratic principles, such as free and fair elections, separation of powers, and mechanisms for citizen participation.
- d) It is a form of constitutionalism that emphasizes the role of a constitution in facilitating societal change, redressing historical injustices, promoting social justice, and advancing the protection of individual and group rights.

#### Answer: D

**Explanation** – **Transformative constitutionalism is a legal theory** that emphasizes the role of constitutions in promoting social and economic change. It is based on the idea that constitutions are not simply static documents, but rather living instruments that can be used to transform societies for the better. Transformative constitutionalists believe that **judges should play an active role** in interpreting and applying constitutions to promote social justice and equality.





#### **PRELIMS**

#### Q.1) Consider the following statements:

- 1. The Udhampur-Srinagar-Baramulla Rail Link aims at integrating Ladakh with the rest of India.
- 2. In order to prevent water freezing, engineers at the Rail Coach Factory (RCF) have designed double-walled composite insulated water tanks.

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

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

#### Answer: B

#### Explanation -

Statement 1 is incorrect. Udhampur-Srinagar-Baramula Rail Link Project (USBRL) is 272 km-long. The project connects **Udhampur to Baramulla**. It aims to connect Kashmir Valley with the rest of the country by a railway line. It includes 38 tunnels with a combined length of 119 kilometers. The longest tunnel in the project is Tunnel T-49, which is 12.75 kilometers long making it India's longest transportation tunnel. There are 927 bridges in total. One of the bridges is Chenab Bridge which will be the highest railway bridge in the world. **Indian railway's first cable-stayed bridge is also being constructed on Anji Khad**.

**Statement 2 is correct**. There are many challenges being faced by the engineering and they developed indigenous innovations to address these challenges. For example, in order to prevent **water freezing**, engineers have designed double-walled composite insulated water tanks. These tanks have a design similar to thermoplastic bottles, with two walls and a foam insulation layer that traps air. This can keep water in liquid form for 16 to 20 hours, even in sub-zero conditions, ensuring toilets and taps function properly.

Source: ForumIAS

## Q.2) Unmanned aerial vehicles (UAVs) have found diverse applications. Which of the following is the fundamental principle behind the operation of unmanned aerial vehicles (UAVs)?

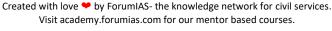
- 1. Aerodynamics
- 2. Hydrodynamics
- 3. Thermodynamics
- 4. Quantum Mechanics

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

- a) 1 only
- b) 1 and 3 only
- c) 1, 2 and 4 only
- d) All of the above

#### Answer: A

**Explanation – Unmanned aerial vehicles (UAVs)**, also known as drones, are aircraft that fly without a human pilot on board. They can be controlled remotely or programmed to fly autonomously. **UAVs operate on the principle of aerodynamics**, which is the study of how air moves around objects. UAVs use their wings and propellers to create lift, which is the force that





counteracts gravity and allows them to fly. In addition to aerodynamics, UAVs also use other principles of physics, such as thrust and drag, to fly.

Source: ForumIAS

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

- 1. The Baltic states refer to the three countries located on the western coast of the Baltic Sea.
- 2. All three countries are members of NATO, the European Union, the Eurozone, and the OECD.
- 3. The Baltic Sea is a part of the Atlantic Ocean.

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

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

#### Answer: B

#### Explanation -

**Statement 1 is incorrect**. The Baltic states are three countries on the eastern coast of the Baltic Sea: Estonia, Latvia, and Lithuania. They are bordered by Russia to the east, Belarus to the southeast, Poland to the southwest, and the Baltic Sea to the west and north. These countries are also classified as high-income economies by the World Bank and maintain a very high Human Development Index.

**Statements 2 and 3 are correct**. All three countries are members of NATO, the European Union, the Eurozone, and the OECD. The Baltic Sea is a part of the Atlantic Ocean.

Source: ForumIAS

#### Q.4) Consider the following statements:

- 1. It is a declaration by the G20 leaders on the need for enhanced global cooperation and sharing of best practices on sustainable use of water.
- 2. The group is led by the leaders of the G20 countries.
- 3. During the recently concluded 9th P20 summit, discussions were held on the challenges pertaining to the integration of the Massive Infrared and Radio Astronomy (MIRA) concept within the domain of scientific research.

## How many of the statements given above are correct with reference to the G20 Parliamentary Speakers' Summit (P20)?

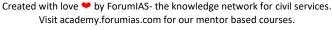
- a) Only one
- b) Only two
- c) All three
- d) None

#### **Answer: D**

#### Explanation -

**Statement 1 is incorrect**. The P20 summit is a meeting of the Speakers of Parliament of the G20 countries, and it is not a decision-making body. The G20 leaders are expected to issue a declaration on water at the end of their summit in November 2023, but this declaration will not be the result of the P20 summit.

**Statement 2 is incorrect**. The P20 Summit is an important event as it provides a platform for the Speakers of Parliament to have a direct dialogue with the G20 leaders. The Speakers of





Parliament are responsible for representing the people of their countries and for making laws. They have a unique perspective on global issues and can provide valuable insights to the G20 leaders.

**Statement 3 is incorrect**. The 9th P20 Summit was hosted by the Parliament of India in New Delhi on October 13-14, 2023. **The theme of the summit was** "Parliaments for One Earth, One Family, One Future." The summit hosted discussions on four subjects: 1) Accelerating SDGs 2) Sustainable Energy Transition 3) Women led Development and 4) Transformation in Peoples' Lives through Public Digital Platforms.

Source: ForumIAS

## Q.5) "75/25 Initiative" sometimes seen in the news. In this context, which one of the following statements is correct?

- a) It is a program that provides enhanced funding for Medicaid eligibility systems as part of a state's mechanized claims processing system.
- b) It aims at screening and providing standard of care for 75 million individuals with hypertension and diabetes by 2025.
- c) Its objective is to achieve a 75 MW increase in renewable energy capacity by the year 2025.
- d) It is a green bond issuance figure of USD 40 billion that extends to all sectors covered in Climate Bonds.

#### Answer: B

**Explanation** – **The 75/25 initiative** is an ambitious program launched by the Indian government to screen and put 75 million people with hypertension and diabetes on Standard Care by 2025. **The initiative was launched at a G20 co-branded event "Accelerating the Prevention and Management of Hypertension and Diabetes" organized jointly by the Union Health Ministry in collaboration with the WHO Country office India to mark the World Hypertension Day, 2023. The initiative aims to scale up hypertension and diabetes services in primary health care and complete screening of all individuals aged 30 years and above.** 

Source: ForumIAS

### Q.6) With reference to Highly Pathogenic Avian Influenza (HPAI), consider the following statements:

- 1. It is a disease that affects only wild birds and has no impact on poultry.
- 2. It is caused by the influenza A virus, which can mutate rapidly and create new strains of the virus.
- 3. It can be transmitted to humans through contact with infected birds or their droppings.
- 4. India does not permit vaccination against HPAI.

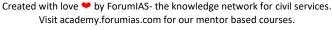
#### How many of the statements given above are correct?

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

#### Answer: C

#### Explanation -

**Statement 1 is incorrect**. HPAI also known as bird flu, is a severe and deadly viral disease that affects birds. HPAI can infect both wild birds and poultry, and it can cause severe illness and death in both types of birds.





**Statements 2, 3 and 4 are correct**. HPIA is caused by the influenza A virus, which can mutate rapidly and create new strains of the virus. HPAI can be transmitted to humans through contact with infected birds or their droppings. Recently, **World Organisation for Animal Health (WOAH)** has approved India's self-declaration of freedom from Highly Pathogenic Avian Influenza (HPAI) in specific poultry compartments. India does not permit vaccination against HPAI.

Source: ForumIAS

#### Q.7) Which one of the following statements is correct regarding "Social democracy"?

- a) It is a political philosophy that supports the idea of a completely free market with no government intervention.
- b) It is a philosophy that supports the idea of a completely planned economy with no private ownership of the means of production.
- c) It is a movement that seeks to establish a society based on individualism and laissez-faire capitalism.
- d) It is based on the principles of liberty, equality, solidarity, and justice.

#### Answer: D

**Explanation** – Social democracy is a political, social, and economic philosophy within socialism that supports gradual and democratic means to achieve socialism. It is based on the principles of liberty, equality, solidarity, and justice. It seeks to create a society where everyone has the opportunity to reach their full potential and to live a decent life.

Source: ForumIAS

#### Q.8) Consider the following statements:

- 1. Despite increasing the number of UG and PG medical seats over the past decade, the demand for medical education still exceeds the supply of seats.
- 2. Private colleges face financial risks in scaling up, especially when seats remain vacant, leading to potential fee hikes.

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

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

#### Answer: C

#### Explanation -

**Statements 1 and 2 are correct**. According to the National Medical Commission (NMC), the number of UG and PG medical seats in India has increased by over 50% in the past decade. However, the demand for medical education has also increased significantly during this time. Private colleges typically rely on tuition fees as their main source of revenue. As a result, they need to have a certain number of students enrolled in order to cover their costs. If a private college has vacant seats, it will lose revenue, which can lead to financial difficulties.



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

- 1. High-intensity wars are typically fought by irregular forces such as militias, guerrilla groups, and other non-state actors who are often poorly equipped and trained.
- 2. Insurgencies are usually fought with the aim of undermining the legitimacy and authority of the state and often involve the use of defensive tactics and strategies.
- 3. The ongoing conflict between Ukraine and Russia represents a form of insurgency.

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

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

#### Answer: B

#### Explanation -

**Statements 1 and 3 are incorrect**. High-intensity wars are typically fought by professional soldiers who are trained and equipped to engage in large-scale combat operations. The ongoing conflict between Ukraine and Russia represents a form of High-intensity wars. High-intensity wars require a large number of artillery shells, drones, and other equipment, putting stress on production capacity.

**Statements 2 is correct**. Insurgencies are usually fought with the aim of undermining the legitimacy and authority of the state, and often involve the use of defensive tactics and strategies.

Source: ForumIAS

#### Q.10) Consider the following statements:

- 1. India is home to nearly 18% of the world's population but has only 4% of its freshwater resources.
- 2. Agriculture in India utilizes less than 70% of the available freshwater resources.

#### 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: A

#### Explanation -

**Statement 1 is correct**. India is home to nearly 18% of the world's population but has only 4% of its freshwater resources. India is the most populous country in the world, with over 1.4 billion people. However, it has only 4% of the world's freshwater resources. This makes India a water-stressed country, with a per capita water availability of only 1,500 cubic meters per year. This is well below the global average of 6,000 cubic meters per year.

**Statement 2 is incorrect**. India's high dependency on water for agriculture is highlighted by two different sources: FAO estimates 90% of the water is used in farming, while India's Central Water Commission suggests it's 78%.



#### **PRELIMS**

#### Q.1) With reference to Sir Syed Ahmed Khan, consider the following statements:

- 1. He was a strong advocate for women's education and campaigned against harmful practices such as female infanticide, polygamy, child marriage, and sati.
- 2. The "Causes of the Indian Revolt" is a famous book written by Sir Syed Ahmed Khan.
- 3. Sir Syed Ahmed Khan's religious writings show that he was a staunch supporter of traditional dogma and religious orthodoxy.

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

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

#### Answer: A Explanation –

**Statements 1 and 2** are correct. Sir Syed Ahmed Khan was a Muslim reformer and educationalist who played a significant role in the upliftment of women in India. He was a strong advocate for women's education and campaigned against harmful practices such as female infanticide, polygamy, child marriage, and sati. He believed that education was the key to the progress of the Muslim community. He worked tirelessly to promote education among Muslims, and he founded several schools and colleges, including the Mohammedan Anglo-Oriental College (MAO College) at Aligarh, which later became Aligarh Muslim University. He wrote Causes of the Indian Revolt. This book analyzed the reasons behind the Indian Rebellion of 1857, emphasizing the socio-political and economic factors that contributed to the revolt

**Statement 3** is incorrect. Sir Syed Ahmed Khan is more commonly recognized for his efforts to reconcile traditional Islamic knowledge with modern scientific and rational thought. He advocated for a more rational and scientific interpretation of Islamic teachings and sought to bring about reforms in religious thinking. He believed that Muslims should embrace modern education and scientific knowledge while also maintaining their cultural and religious identity. He emphasized the importance of ijtihad (independent reasoning) within Islamic jurisprudence and encouraged Muslims to adapt to the changing times.

#### Source: ForumIAS

#### Q.2) Consider the following statements:

**Statement-I:** Palliative care is a specialized form of medical care and support provided to individuals with serious, life-limiting illnesses, with the goal of enhancing their quality of life and alleviating suffering.

**Statement-II:** Palliative care is included in the list of services covered by Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).

#### 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

#### Answer: B

#### Explanation -

**Statements 1 and 2** are correct. Palliative care is a specialized form of medical care and support provided to individuals with serious, life-limiting illnesses like cancers, end-stage kidney disease,

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debilitating brain disorders, complications of diabetes, and heart disease among others., with the goal of enhancing their quality of life and alleviating suffering. It takes into consideration not just the physical dimension of health but also looks at the social and economic realities of the patient and the family. Currently, palliative care is not covered under most insurance schemes in India. However, palliative care is included in the list of services covered by Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).

Source: ForumIAS

#### Q.3) With reference to the Collegium system in India, consider the following statements:

- 1. The collegium system governs the appointment and transfer of judges in the subordinate courts.
- 2. The collegium system is based on the principle of judicial independence.
- 3. A reiterated decision by the Collegium holds legal authority and is mandatory for the government to implement.

#### 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

## Answer: B Explanation -

**Statement 1** is incorrect. The collegium system governs the appointment and transfer of judges in the Supreme Court and the High Court. The process of appointing subordinate court judges varies from state to state. However, in general, the state governments appoint subordinate court judges from a list of candidates who have been recommended by the High Court. The High Court prepares the list of candidates based on their performance in a competitive examination and an interview.

**Statements 2** is correct. The collegium system is based on the principle of judicial independence. It is believed that the judiciary should be independent of the executive and the legislature, and that the best way to ensure this independence is to give the judiciary a say in its own appointments.

**Statement 3** is correct. If the government returns a recommendation from the Collegium for reconsideration, and the Collegium reiterates its recommendation, the government is bound to accept it. This is because the Supreme Court has held that the Collegium is the best body to assess the suitability of a candidate for judicial appointment. The Supreme Court has also held that the government cannot arbitrarily delay the appointment of judges. If the government does not appoint a judge within a reasonable time frame, the Supreme Court can issue a mandamus order directing the government to make the appointment.



#### Q.4) Arrange the following Indian ports in the North to South direction:

- 1. Nagapattinam Port
- 2. Dhamra Port
- 3. Gangavaram Port
- 4. Haldia Port

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

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

#### Answer: A

**Explanation** – Haldia Port is in West Bengal, Dhamra Port is in Odisha, Gangavaram Port is in Andhra Pradesh and Nagapattinam Port is in Tamil Nadu.

**Source:** ForumIAS

#### Q.5) Consider the following statements:

- 1. There is no single national-level regulator in India that is responsible for approving all environmental clearances for projects.
- 2. Environmental Impact Assessment (EIA) is only required for projects that are likely to have a negative impact on the environment.

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

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

#### Answer: A

#### Explanation -

**Statement 1** is correct. Environmental Clearance (EC) is a process by which the Indian government ensures that development projects do not have an undue negative impact on the environment. The EC process is governed by the Environment Protection Act, 1986, and the Environment Impact Assessment (EIA) Notification, 2006. Under the current system, EC is granted by either the central government or the state government, depending on the type and size of the project.

**Statement 2** is incorrect. EIA is a process that assesses the potential environmental consequences of a proposed project, including both positive and negative impacts. The purpose of EIA is to ensure that decision-makers, along with the public, have a comprehensive understanding of how a project may affect the environment, allowing for informed decision-making and the implementation of mitigation measures to minimize or offset negative impacts. Positive impacts, such as environmental benefits, can also be evaluated within the EIA process.



## Q.6) With reference to the Eastern Dedicated Freight Corridor (EDFC), consider the following statements:

- 1. It is a pipeline project for transporting oil and gas from the eastern states of India to the western states.
- 2. It is being constructed by the Dedicated Freight Corridor Corporation of India Limited (DFCCIL).
- 3. The corridor runs from Alwar in Rajasthan to Giridih in Jharkhand.

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

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

#### Answer: A

#### Explanation -

**Statements 1 and 3** are incorrect. Eastern Dedicated Freight Corridor (EDFC) is an 1,839-kilometer-long railway corridor in India that is dedicated to freight transport. It is one of two dedicated freight corridors currently under construction in India, the other being the Western Dedicated Freight Corridor (WDFC). The EDFC runs from Ludhiana in Punjab to Dankuni in West Bengal, passing through the states of Haryana, Uttar Pradesh, Bihar, Jharkhand, and West Bengal. It is a double-track electrified railway line with a design speed of 120 kilometers per hour.

**Statement 2** is correct. The EDFC is being constructed by the Dedicated Freight Corridor Corporation of India Limited (DFCCIL), a public sector enterprise under the Ministry of Railways.

Source: ForumIAS

## Q.7) Market-based solutions to carbon mitigation are policies that use market forces to reduce greenhouse gas emissions. In this context, which of the following solutions to carbon mitigation is explicitly used by India?

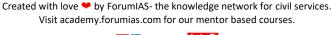
- 1. Carbon tax
- 2. Perform, Achieve and Trade (PAT)
- 3. Energy efficiency certificates (EEC)
- 4. Renewable energy subsidies

#### Select the correct answer from the code given below:

- a) 1, 2 and 3 only
- b) 2, 3 and 4 only
- c) 2 and 4 only
- d) All of the above

#### Answer: B

**Explanation** – Market-based solutions to carbon mitigation is used by India are: 1) carbon trading, 2) Renewable energy subsidies, 3) Perform, Achieve and Trade (PAT), 4) Energy efficiency certificates (EECs), 5) Energy Conservation Building Code (ECBC). Moreover, India does not currently have a standalone carbon tax. However, the Indian government has implemented a number of policies and measures that put an implicit price on carbon. For example, the Indian government has imposed a coal cess, which is a tax on the production of coal.





#### Q.8) Consider the following statements with reference to Geographical Indications (GI) Tag:

- 1. GI Tag is a certification that ensures a product is of the highest quality.
- 2. To be eligible for a GI tag, a product must have a specific geographical origin and its unique qualities must be due to that origin.
- 3. Jaderi namakatti, from Tamil Nadu, has recently receive the GI tag.

#### 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

#### Answer: B

#### Explanation -

**Statement 1** is incorrect. A GI tag, or geographical indication, is actually a certification that a product has a specific geographical origin and possesses unique qualities or a reputation that is related to that origin. It doesn't necessarily mean that the product is of the highest quality. It just means that it's distinctive because of its place of origin.

**Statements 2 and 3** are correct. To be eligible for a GI tag, a product must have a specific geographical origin and its unique qualities must be due to that origin. Jaderi namakatti, from Tamil Nadu, has recently receive the GI tag. Jaderi Namakatti is a type of clay stick that is white in colour. They are usually available in finger-like shape with a smooth texture.

Source: ForumIAS

#### Q.9) With reference to Metal-insulator transition (MIT) consider the following statements:

- 1. It is a phase transition that occurs in a material when it changes from being a metal to being an insulator.
- 2. Nickel dioxide is capable of undergoing MIT.
- 3. MITs can be triggered by various factors, such as temperature, pressure, and doping.

#### 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

#### Answer: D

#### Explanation -

**Statements 1, 2 and 3** are correct. MIT is a phase transition that occurs in a material when it changes from being a metal to being an insulator. MITs are important in a number of areas of physics and materials science. For example, MITs are used in devices such as transistors and memory devices. MITs are also important in the study of superconductivity and other exotic states of matter. Vanadium dioxide (VO2), Nickel dioxide (NiO2), Samarium nickelate are some of the metals that can undergo MIT. MITs can be triggered by various factors, such as temperature, pressure, and doping.

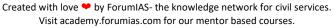


#### Q.10) Dampa tiger reserve is located in -

- a) Madhya Pradesh
- b) Mizoram
- c) Assam
- d) Uttarakhand

#### Answer: B

**Explanation** – The Dampa Tiger Reserve is a tiger reserve in the Western part of the state of Mizoram, India. It is the largest wildlife sanctuary in Mizoram, covering an area of 500 km<sup>2</sup>. The reserve was declared a tiger reserve in 1994 and is part of Project Tiger.





#### **PRELIMS**

#### Q.1) Consider the following statements with reference to Bufoides bhupathyi:

- 1. Bufoides bhupathyi is a toad species.
- 2. It is found in the rainforests of South India.
- 3. It differs from other similar species in terms of colouration, skin and the presence of depressed parotid glands.

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

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

#### Answer: B

#### Explanation -

**Statements 1 and 3** are correct. **Bufoides bhupathyi** is a newly discovered species of toad that is endemic to the Dampa Tiger Reserve in Mizoram, India. It differs from other similar species in terms of colouration, skin and the presence of depressed parotid glands. The two species, Bufoides meghalayanus and Bufoides kempi were found in Meghalaya.

**Statement 2** is incorrect. Bufoides bhupathyi is currently known to exist only in the Dampa tiger reserve in Mizoram.

Source: ForumIAS

#### Q.2) Consider the following statements:

**Statement-I**: The Gulf of Guinea possesses abundant reserves of oil and natural gas resources.

**Statement-II**: The Gulf of Guinea is home to the largest oil reserves in the world.

#### Which one of the following is correct in respect of the above statements?

- a) Both Statement-I and Statement-II are correct, and Statement-II is the correct explanation for Statement-I
- b) Both Statement-I and Statement-II are correct, and Statement-II is not the correct explanation for Statement-I
- c) Statement-I is correct, but Statement-II is incorrect
- d) Statement-I is incorrect, but Statement-II is correct

#### Answer: C

#### Explanation -

**Statement 1** is correct. The Gulf of Guinea is the northeastern most part of the Atlantic Ocean. Null Island, defined as the intersection of the Equator and Prime Meridian (zero degrees latitude and longitude) is in the gulf. Among the many rivers that drain into the Gulf of Guinea are the Niger and the Volta. The Gulf of Guinea is known for its rich maritime resources, including oil and natural gas. It is also an important region for international shipping and trade. However, the Gulf of Guinea is also known as the world's hotspot for maritime piracy.

**Statement 2** is incorrect. Venezuela has the highest reserves of oil in the world, with an estimated 300 billion barrels of oil. This is more than twice the reserves of Saudi Arabia, the second-largest oil reserve holder.



Q.3) With reference to "White phosphorus" which of the following statements are correct?

- 1. It is a highly combustible chemical that burns quickly and brightly when exposed to air.
- 2. It is classified as a chemical weapon because of its high toxicity.
- 3. It is not found naturally but is produced from phosphate rocks.

#### 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

#### Answer: C Explanation -

**Statements 1 is correct.** White phosphorus is a waxy, yellowish-to-clear chemical with a pungent, garlic-like odour. It is a highly combustible chemical that burns quickly and brightly when exposed to air. It can be deployed through artillery shells, bombs, rockets or grenades. It is used primarily to create a smokescreen at night or during the day to hide the visual movement of troops.

**Statement 3 is correct.** White phosphorus is not found naturally, but is produced from a mineral called apatite, which is a phosphate mineral found in phosphate rocks. The process of producing white phosphorus involves heating apatite to extremely high temperatures in the absence of oxygen, and the phosphorus is then collected as a white, waxy substance.

**Statement 2** is incorrect. White phosphorus is not considered a chemical weapon because it operates primarily by heat and flame rather than toxicity.

Source: ForumIAS

## Q.4) The movement of the tectonic plates can cause a number of geological events. In this context, which of the following events are caused by the movement of tectonic plates?

- 1. Earthquakes
- 2. Karst Landscapes
- 3. Rift valleys
- 4. Geomagnetic Reversals
- 5. Mountain building
- 6. Ocean trenches

#### Select the correct codes given below:

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

#### Answer: D

**Explanation** – Karst landscapes are formed due to the dissolution of soluble rocks, such as limestone and marble, by water. Karst landscapes are characterized by unique geological features such as sinkholes, caves, and underground drainage systems. Geomagnetic reversals are events in which the Earth's magnetic field reverses direction. It is not related to tectonic plate movements but is associated with processes in the Earth's outer core.



**Q.5) With reference** to **essential features of a democracy**, which of the following statements is/are correct?

- 1. The principle of majority decision-making, where decisions should also be made under democratic conditions, treats all members with equal respect and concern.
- 2. A culturally or ethnically homogeneous population where the majority of individuals share the same or a very similar ethnic or racial background.

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

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

#### Answer: A Explanation –

**Statement 1** is correct. In a democracy, the majority rules. This means that decisions are made based on the will of the majority. However, the rights of the minority are also protected. Moreover, decisions should also be made under democratic conditions treating all members with equal respect and concern.

**Statement 2** is incorrect. A culturally or ethnically homogeneous population where the majority of individuals share the same or a very similar ethnic or racial background is not an essential feature of a democracy. In fact, democracies are often characterized by their diversity, with people from different ethnic, religious, and cultural backgrounds living together.

Source: ForumIAS

#### Q.6) Consider the following statements:

- 1. E-rupee is a cryptocurrency issued by the Indian government.
- 2. The e-rupee is different from other digital payment methods, such as UPI, in that it is a direct liability of the RBI.

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

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

#### **Answer: B**

**Statement 1 is incorrect.** E-rupee is a digital currency issued by the Reserve Bank of India (RBI) as a central bank digital currency (CBDC). It is a CBDC, which means that it is issued and regulated by the central bank. Cryptocurrencies, on the other hand, are decentralized and not backed by any government or central bank.

**Statement 2 is correct.** The e-rupee is different from other digital payment methods, such as UPI and Paytm, in that it is a direct liability of the RBI. This means that it is backed by the full faith and credit of the government of India. The e-rupee is also different from cryptocurrencies in that it is not decentralized and is not subject to the volatility of the cryptocurrency market.



## Q.7) With reference to Open Acreage Licensing Policy (OALP) consider the following statements:

- 1. It is a part of the Hydrocarbon Exploration and Licensing Policy (HELP).
- 2. OALP gives a company an option to select the exploration blocks on its own without waiting for the formal bid round from the Government.
- 3. Under OALP, a bidder intending to explore hydrocarbons may apply to the Government seeking exploration of any new block which was not already covered by exploration.

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

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

## Answer: C Explanation -

**Statements 1, 2 and 3** are correct. OALP is a part of the Hydrocarbon Exploration and Licensing Policy (HELP). It was introduced by the government in 2016 and became operational from 2017. OALP gives an option to a company to select the exploration blocks on its own without waiting for the formal bid round from the Government. Under OALP, a bidder intending to explore hydrocarbons may apply to the Government seeking exploration of any new block which was not already covered by exploration.

Source: ForumIAS

# Q.8) National Highways Authority of India (NHAI) has released the Advanced Traffic Management System (ATMS) Standards and Specifications 2023 to improve road safety and reduce incident response time. Which of the following technological system has been introduced under Advanced Traffic Management System (ATMS)?

- 1. Video Incident Detection and Enforcement System (Vides)
- 2. Traffic Monitoring Camera System (TMCS)
- 3. Voice-Activated Accident Detection System (VAADS)

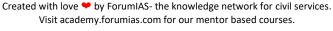
#### Select the correct codes given below:

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

#### Answer: C

**Explanation -** Key Technologies introduced under ATMS are:

- Video Incident Detection and Enforcement System (Vides): It aims to enhance digital enforcement of traffic rules.
- The cameras can identify 14 distinct incidents, such as triple riding, helmet and seatbelt violations, wrong lane driving, presence of animals on the highway, and pedestrian crossings.
- Depending on the detected incident, it can alert route patrol vehicles, ambulances, generate e-challans, relay alerts on variable messaging boards, or notify nearby travelers through the 'rajmargyatra' mobile app.
- It will be installed every 10 kilometers along national highways. State-of-the-art command and control centers will also be set up every 100 kilometers, integrating various camera feeds.





- **Traffic Monitoring Camera System (TMCS):** It is installed every 1 km on the National Highway. It will be upgraded with advanced capabilities like automated detection of accidents and stalled vehicles.
- **Intelligent Transportation System (ITS):** ITS is a system that uses technology to improve the efficiency and safety of transportation. ITS includes a variety of components, such as traffic signals, variable message signs, and electronic toll collection systems.

Source: ForumIAS

### Q.9) Which one of the following statements best describes the objective "Global Maritime India Summit"?

- a) Its objective is to encourage investment in the Indian fishing industry.
- b) It is a conference that aims to promote India as a global maritime hub and to attract investment in the Indian maritime sector.
- c) It is primarily a conference for companies that want to develop tourism infrastructure along the Indian coastline.
- d) It is a conference catering to companies interested in the exploration of oil and gas reserves within the Indian Ocean region.

#### Answer: B

**Explanation** – The Global Maritime India Summit is an annual event aimed at promoting global and regional partnerships and facilitating investments in the Indian maritime economy. The summit brings together global maritime players, policy makers, regulators, key opinion leaders, and industry leaders through a series of engaging dialogues, forums, and knowledge exchange platforms.

Source: ForumIAS

#### Q.10) Consider the following statements:

- 1. 75% of new infectious diseases that have emerged in the last 30 years are zoonotic.
- 2. In India, snake bites continue to be a huge problem causing nearly 60,000 deaths annually.

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

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

#### Answer: C

**Explanation** – Union Health Secretary has delivered the keynote address at the National Conclave on "Augmented Zoonotic Diseases Surveillance at Human – Wildlife Interface" and National Conclave for Endorsement of "National Action Plan for Prevention and Control of Snakebite Envenoming". As per his speech,

- Zoonotic disease is one of the areas of concern which is affecting humans as well as animals' health. 75% of new infectious diseases that have emerged in the last 30 years are zoonotic.
- Snake bite is a neglected public health issue in many tropical and subtropical countries. Most of these occur in Africa, Asia and Latin America. In Asia up to 2 million people are envenomed by snakes each year. In India, snake bites continue to be a huge problem causing nearly 60,000 deaths annually.

Source: ForumIAS





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#### **PRELIMS**

#### Q.1) Consider the following statements:

- 1. A city that wants to host the Olympics first seeks support from its National Olympic Committee (NOC).
- 2. The International Olympic Committee (IOC) is an international non-governmental not-for-profit organization.
- 3. IOC members are allowed to vote in the second instance for the host city selection process if their country is a candidate.

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

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

#### Answer: B

#### Explanation -

**Statements 1 and 2** are correct. A city that wants to host the Olympics first seeks support from its National Olympic Committee (NOC). The NOC communicates with the International Olympic Committee (IOC) for advice and support. If the NOC is serious about the project, it sends an official letter to the IOC. The IOC is an international non-governmental not-for-profit organization. It is the authority responsible for organizing the modern (Summer, Winter, and Youth) Olympic Games.

Statement 3 is incorrect. An IOC member cannot vote when their country is a candidate whether in first or second instance. This is because the Olympic Charter prohibits IOC members from taking part in the vote on the choice of a host city for the Olympic Games if the member is a national of a country which is a candidate. This rule is in place to prevent conflicts of interest.

#### Source: ForumIAS

#### Q.2) Consider the following statements:

- 1. Nearly 75% of India's transshipment cargo is handled at ports outside India.
- 2. Vizhinjam Port is India's first international deepwater transshipment port.
- 3. Establishing a transshipment hub in India can help in attracting foreign direct investment (FDI).
- 4. The east coast in India has more ports than the west coast because of its strategic trade significance.

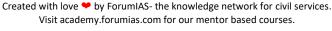
#### How many of the above statements are correct?

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

#### Answer: C

#### Explanation -

**Statements 1, 2 and 3** are correct. India has 13 major ports but lacks infrastructure for handling ultra-large container ships. About 75% of India's transshipment cargo is managed at foreign ports like Colombo, Singapore and Klang. Vizhinjam Port is India's first international





deepwater transshipment port. It is also the first greenfield port project to receive viability gap funding from the government of India. It is located in Kerala.

Establishing a transshipment hub in India offers several advantages such as:

- Forex savings (saving foreign exchange)
- Attracting foreign direct investment (FDI)
- Creating job opportunities
- Encourages various associated businesses such as ship repair services, crew change facilities, logistics value-added services, Warehousing among others.
- Can attract a significant portion of the container transshipment traffic currently diverted to ports in Colombo, Singapore, and Dubai.
- Enhancing operational and logistics efficiency.

**Statement 4** is incorrect. The west coast of India has more ports than the east coast due to deeper Sea, more developed coastline, Closer to shipping routes, more favorable climate for shipping, with fewer storms and cyclones.

Source: ForumIAS

## Q.3) The Amazon rainforest is experiencing a severe drought with rivers drying, affecting animals and people in the region. Which of the following are the primary/direct reasons behind the drought in the Amazon?

- 1. El Nino Effect
- 2. High Atlantic Ocean Temperatures
- 3. North Atlantic Oscillation (NAO)
- 4. La Niña Effect
- 5. Volcanic Eruptions

#### Select the correct code given below:

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

#### Answer: B

**Explanation** – The NAO is a climate pattern that affects the Atlantic Ocean, but its impact on the Amazon is indirect. The NAO affects the position of the Intertropical Convergence Zone (ITCZ), which is a band of low pressure that influences the movement of moisture in the atmosphere. When the ITCZ moves away from the Amazon, it can result in less rainfall and increased risk of drought.

Volcanic eruptions can release large amounts of ash and sulfur dioxide into the atmosphere. This can block out the sun and reduce rainfall. However, volcanic eruptions are not a major cause of the Amazon drought.

La Niña is a cooling phase of ENSO that can lead to increased rainfall in the Amazon whereas the opposite happens in El Nino.

High Atlantic Ocean Temperatures: The northern tropical Atlantic Ocean has unusually warm waters. When this warm water heats the air, it moves to the Amazon. This heated air stops clouds from forming and reduces rain.



#### Q.4) With reference to the Informal Sector in India, consider the following statements:

- 1. The urban informal sector is a key player in job creation, which can help in reducing the scope and intensity of poverty.
- 2. Informal sector in India is characterized by high productivity.
- 3. The service sector in India is largely dominated by informal businesses.

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

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

#### Answer: B

#### Explanation -

**Statements 1 and 3** are correct. The term "informal" describes a wide range of employment situations, which include; Absence of social security benefits, working in small-scale enterprises, and job-insecurity. It also encompasses economic activities that are not officially registered. The urban informal sector is linked to the persistence of urban poverty. At the same time, the urban informal sector is a key player in job creation, which can help in reducing the scope and intensity of poverty.

The informal sector in India accounts for over 80% of employment, and the service sector is the largest employer in the country. This means that a large majority of workers in the service sector are employed in the informal sector. Further, according to the International Labour Organization (ILO), the informal sector accounts for over 50% of employment in the Indian service sector. This means that over half of all workers in the Indian service sector are not registered with the government and do not have access to social security benefits or other protections.

**Statement 2** is incorrect. Following are the features of informal sector in India: Unregistered and unregulated, small scale, Low productivity, Low wages, Unsafe and unhealthy working conditions.

Source: ForumIAS

### Q.5) With reference to the India Labour Market, which of the following statements is/are correct?

- 1. Only 54% of salaried workers have access to crucial social-security benefits, leaving a significant portion vulnerable.
- 2. The construction sector is the largest employment generator in India in 2023.

#### Select the correct answer from the code given below:

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

#### Answer: A

#### Explanation -

**Statement 1** is correct. Only 54% of salaried workers have access to crucial social-security benefits, leaving a significant portion vulnerable. This leaves a significant portion of the workforce vulnerable to financial hardship in the event of unemployment, illness, or retirement.





**Statement 2** is incorrect. The service sector has been the highest employment generator in India this year. In August, the service sector reported the sharpest rise in job creation in over 14 years. The sector has been growing rapidly in recent years, driven by factors such as the growth of the digital economy, the expansion of financial services, and the increasing demand for healthcare and education services. The construction sector is the second-largest employment generator in India.

Source: ForumIAS

#### Q.6) With reference to Lymphatic Filariasis (LF) consider the following statements:

- 1. Lymphatic Filariasis is a bacterial disease caused by Salmonella enterica.
- 2. Lao People's Democratic Republic and Bangladesh has eliminated lymphatic filariasis (LF).
- 3. In India, the government is conducting Targeted Drug Administration (TDA) campaign to eliminate Lymphatic Filariasis (LF).

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

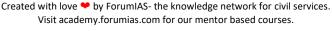
- a) 1 only
- b) 2 only
- c) 2 and 3 only
- d) 1, 2 and 3

### Answer: B Explanation -

**Statements 1 and 3** are incorrect. Lymphatic filariasis commonly known as elephantiasis is a neglected tropical disease. It is a parasitic disease caused by thread-like worms called filarial nematodes. The disease is transmitted to humans through the bites of infected mosquitoes. India aims to eliminate Filariasis by 2027, three years ahead of the global target. For this, Government of India has launched a five-pronged strategy for elimination of LF. The five pillars are as follows:

- Mass drug administration (MDA)/Multi-drug Administration Campaign (MDA) twice a year synchronized with National Deworming Day (10th Feb and 10th August),
- Early diagnosis and treatment; engagement of medical colleges for strengthening Morbidity management and disability (MMDP) services,
- Integrated Vector Control with multi sectoral coordinated efforts,
- For inter sectoral convergence with allied departments and ministries,
- Leveraging existing digital platforms for LF and exploring alternate diagnostics.

**Statement 2** is correct. Lao PDR is now the second country after Bangladesh to eliminate lymphatic filariasis (LF) in 2023.





## Q.7) Which of the following methods have been suggested as solar geoengineering techniques to address the issue of global warming?

- 1. Stratospheric aerosol injection (SAI)
- 2. Direct air capture (DAC)
- 3. Marine cloud brightening (MCB)
- 4. Space-based sunshades
- 5. Cloud thinning

#### Select the correct code given below:

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

#### Answer: D

**Explanation** – Some of the proposed solar geoengineering techniques to address the issue of global warming are:

Stratospheric aerosol injection (SAI): SAI involves injecting small particles into the stratosphere, which would reflect sunlight back to space.

Marine cloud brightening (MCB): MCB involves spraying seawater into marine clouds to make them whiter and more reflective. MCB has the potential to be more effective than SAI, but it is also more expensive and difficult to implement.

Space-based sunshades: Space-based sunshades would be placed in orbit around the Earth to reflect sunlight back to space. Space-based sunshades are a very expensive and technologically challenging option, but they have the potential to be very effective.

Cloud thinning is a way to reflect sunlight back to space by making clouds thinner and less reflective. This could be done by injecting ice nuclei into cirrus clouds. Injecting ice nuclei into cirrus clouds would cause them to produce more and larger ice crystals. This would make the clouds thinner and more reflective, which would allow more sunlight to be reflected back to space.

Direct air capture (DAC) is a technique of removing carbon dioxide directly from the atmosphere. However, it is not a solar engineering technique.

**Source:** ForumIAS

## Q.8) Which crops among the following have experienced a rise in production during the period of 2022-23?

- 1. Paddy
- 2. Wheat
- 3. Pulses
- 4. Sugarcane
- 5. Cotton

#### Select the correct code given below:

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

#### Answer: B

**Explanation** – According to the Third Advance Estimates for 2022-23 released by the Ministry of Agriculture and Farmers Welfare, the following crops have experienced a rise in production during the period of 2022-23:

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- Rice: 135.5 million tonnes (up 6.7 million tonnes from 2021-22)
- Wheat: 112.7 million tonnes (up 5 million tonnes from 2021-22)
- Maize: 35.9 million tonnes (up 1.4 million tonnes from 2021-22)
- Gram: 11.6 million tonnes (up 1.1 million tonnes from 2021-22)
- Pulses: 27.5 million tonnes (up 0.9 million tonnes from 2021-22)
- Rapeseed and mustard: 12.4 million tonnes (up 1.5 million tonnes from 2021-22)
- Oilseeds: 41 million tonnes (up 1.9 million tonnes from 2021-22)
- Sugarcane: 392.2 million tonnes (up 12.2 million tonnes from 2021-22)

However, Kharif food grains, cotton, groundnut, jute, castor have witnessed a decline.

Source: ForumIAS

#### Q.9) Consider the following statements with reference to Tilapia fish:

- 1. Tilapia are mainly freshwater fish.
- 2. Tilapia is capable of surviving in low-oxygen levels in water.
- 3. Tilapia farming is prohibited in India.
- 4. India has become the third country to confirm the presence of Tilapia parvovirus (TiPV), a disease that impacts fish, in its aquatic ecosystems.

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

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

#### Answer: C

#### Explanation -

**Statements 1, 2 and 4** are correct. Tilapia are mainly freshwater fish. It inhabits the shallow streams, ponds, rivers, and lakes, and less commonly found living in brackish water. Tilapia is capable of surviving in low-oxygen levels in water. Tilapia parvovirus (TiPV) is a small, nonenveloped, single-stranded DNA (ssDNA) virus. The virus was first reported in China in 2019 and Thailand in 2021. India is the third country to report the occurrence of TiPV.

**Statement** 3 is incorrect. In India, tilapia farming is being carried out in different parts of Andhra Pradesh and Kerala. It is also sold in domestic markets as whole fish.

Source: ForumIAS

## Q.10) With reference to the evolution of life, which of the following statements is/are correct?

- 1. Stars play a role in the evolution of life by creating the elements that are essential for life.
- 2. Technological Advancements like communication is integral to the genetic adaptation and evolutionary processes.

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

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

#### Answer: A Explanation –

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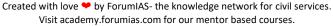


**Statement 1** is correct. Stars play a role in the evolution of life by creating the elements that are essential for life. Stars are formed from clouds of gas and dust. As the stars age, they fuse elements together in their cores. This process creates new elements, which are released into space when the stars explode.

The elements that are created by stars are essential for life. For example, carbon is the basic building block of all organic molecules. Oxygen is essential for respiration. Nitrogen is essential for proteins. Phosphorus is essential for DNA and RNA.

In addition, stars also provide the energy that is needed for life to evolve. The Sun is the main source of energy for life on Earth. The Sun's energy is used by plants to photosynthesize, which creates the food that all other living organisms need.

**Statement 2** is incorrect. Evolutionary processes like natural selection, genetic drift, and mutations operate at a biological level, independent of technology. So, while communication and technology can shape the environment in which life evolves, they're not integral to the actual evolutionary mechanisms.





#### **PRELIMS**

#### Q.1) Which of the following phenomenons are correct regarding an earthquake event?

- 1. The deeper the earthquake, the more intense the shaking will be at the surface.
- 2. Larger magnitude earthquakes will produce more intense shaking.
- 3. The shaking during an earthquake will be more intense the closer you are to the epicenter.
- 4. The presence of peat soil in an area tends to lessen the intensity of earthquakes experienced in that location.

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

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

#### Answer: C Explanation -

**Statements 1 and 4** are incorrect. The deeper the earthquake, the less intense the shaking will be at the surface. This is because:

- Shallow earthquakes, those that occur within about 30 km of the surface, release most of their energy close to the surface. This can cause more intense shaking and more damage to buildings and infrastructure.
- Deep earthquakes, those that occur at depths greater than 30 km, release most of their energy at deeper levels. The energy is dissipated by the time it reaches the surface, resulting in weaker shaking and less damage.

Soft soil can amplify the shaking of earthquakes. When the ground shakes during an earthquake, the vibrations travel through the soil. In soft soils, the vibrations can be amplified due to the soil's low density and low stiffness. This amplification can cause more intense shaking and potentially greater damage to buildings and infrastructure in areas with soft soil. Hence, peat soil, sandy, loamy, clay soils are types of soft soils that can amplify the earthquakes.

Statements 2 and 3 are correct. The magnitude of an earthquake is a measure of the amount of energy released by the earthquake. Larger magnitude earthquakes will produce more intense shaking. The closer you are to the epicenter of an earthquake, the more intense the shaking will be. This is because the energy from the earthquake spreads out in all directions from the epicenter, and the closer you are, the more energy you will be exposed to.





#### Q.2) With reference to Special and Local Laws (SLLs) consider the following statements:

- 1. The Indian Penal Code (IPC) is applicable to all Indian citizens, irrespective of their location, while Special and Local Laws (SLLs) may be specific to particular regions or demographic groups.
- 2. The IPC provides for a range of punishments for different offenses, whereas SLLs generally do not address punishments for offenses.
- 3. SLLs can govern the structure and functioning of local governments, such as municipalities and panchayats.
- 4. The Hindu Succession Act, 1956 is an example of Special and Local Laws (SLLs).

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

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

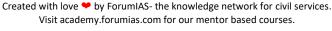
#### Answer: B

#### Explanation -

**Statements 1 and 3** are correct. The Indian Penal Code (IPC) is applicable to all Indian citizens, irrespective of their location, while Special and Local Laws (SLLs) may be specific to particular regions or demographic groups. SLLs can govern the structure and functioning of local governments, such as municipalities and panchayats. For example, SLLs may specify the duties of municipal councils, the process for electing members to local panchayats, and the procedures for handling grievances. So, SLLs are essential for maintaining effective and accountable local governance in India.

Statements 2 and 4 are incorrect. The IPC provides for a range of punishments for different offenses, including imprisonment, fines, and death. SLLs may also provide for a range of punishments, but these punishments may differ from those provided for in the IPC. For example, some SLLs might provide for imprisonment or fines as punishment for violating certain provisions.

The Hindu Succession Act is not an example of a Special and Local Law. The Act is actually a national legislation that governs the inheritance and succession of property among Hindus across the entire country. SLLs are laws that are region-specific or apply to certain groups within a region. Further, special laws are enacted by the parliament but they would apply only to a certain place or region not throughout the country.





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

- 1. Nutrition security can only be achieved sustainably if the producers producing the food make reasonable economic returns that are resilient over time.
- 2. According to the 2023 soil health survey, over 50% of India's cultivable land has experienced an increase in organic carbon levels due to the adoption of sustainable agricultural practices.
- 3. In India, the simultaneous presence of nutrient deficiencies and obesity is referred to as the "dual nutritional challenge."

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

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

#### Answer: B Explanation –

**Statements 1 and 3** are correct. Nutrition security can only be achieved sustainably if the producers producing the food make reasonable economic returns that are resilient over time. This is because: First, farmers need to be able to make a profit in order to stay in business and continue producing food. Second, farmers need to be able to invest in their farms in order to improve productivity and sustainability. Third, farmers need to be able to cope with shocks, such as droughts and floods, which can disrupt food production.

India faces a double burden of malnutrition:

- 1) At one end, a sizable proportion of Indians exhibit nutrient deficiencies. As in the National Family Health Survey, 2019-21, 35% of children are stunted, and 57% of women and 25% of men are anaemic.
- 2) At the other end, due to imbalanced diets and sedentary lifestyles, 24% of adult women and 23% of adult men are now obese.

Statement 2 is incorrect. As in the 2023 soil health survey, almost half the cultivable land in India has become deficient in organic carbon. In States such as Punjab, more than 75% blocks are over-exploited.

Source: ForumIAS

#### Q.4) Consider the following statements:

- 1. India is the world's third-largest emitter of greenhouse gases, but its per capita emissions are much lower than those of developed countries.
- 2. India's Nationally Determined Contributions (NDC) aim to ensure that 40% of the total installed power generation capacity is clean energy.

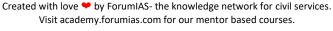
#### Select the correct answer from the codes given below:

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

#### Answer: C

#### Explanation -

**Statements 1 and 2** are correct. India is the world's third-largest emitter of greenhouse gases, but its per capita emissions are much lower than those of developed countries. In 2020, India's





per capita emissions were 2.4 tonnes of carbon dioxide equivalent (tCO2e), while the global average was 6.3 tCO2e. The per capita emissions of developed countries are even higher, with the United States at 16.5 tCO2e and the European Union at 7.2 tCO2e. The main source of greenhouse gas emissions in India is the energy sector, which accounts for about 70% of total emissions. The rest of the emissions come from agriculture, industry, and waste management. India's Nationally Determined Contributions (NDC) aim to ensure that 40% of the total installed power generation capacity is clean energy. India's NDC also includes a number of other ambitious targets, such as reducing emissions intensity by 33-35% by 2030 compared to 2005 levels and creating an additional carbon sink of 2.5-3 GtCO2e through afforestation and reforestation.

Source: ForumIAS

## Q.5) India has been a strong supporter for the principle of Common but differentiated responsibilities (CBDR) in international climate negotiations. Which of the following best describes the reason for India to be a strong supporter of CBDR?

- 1. India holds the view that all nations bear an equal obligation to tackle worldwide environmental challenges, and it considers the principle of CBDR to be an effective means of achieving this goal.
- 2. The concept of CBDR is seen as a way for developing nations like India to share less of the responsibility for their involvement in global environmental issues.
- 3. India argues under CBDR, that developed countries should cut more pollution and help developing countries, because they have polluted more and have the resources to fight climate change.

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

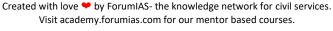
- a) 1 and 2 only
- b) 2 only
- c) 2 and 3 only
- d) 3 only

#### Answer: D Explanation –

**Statements 1 and 2** are incorrect. India does believe in the principle of CBDR, but it does not believe that all nations bear an equal obligation to tackle worldwide environmental challenges. India argues that developed countries have a greater responsibility to reduce their emissions because they have polluted more in the past and have more resources to fight climate change. The principle of CBDR is not about developing nations sharing less responsibility for their involvement in global environmental issues. It is about recognizing that developed and developing nations have different levels of responsibility, based on their level of development and contribution to the problem.

Developed countries have a greater responsibility to reduce their emissions because they have polluted more in the past and have more resources to fight climate change. Developing countries, on the other hand, have a right to develop their economies without harming the environment. However, they also have a responsibility to take steps to reduce their emissions, within their means.

**Statement 3** is correct. India believes that developed countries have a greater responsibility to reduce their emissions because they have polluted more in the past and have more resources to fight climate change. India also argues that developed countries should provide financial and technological assistance to developing countries to help them reduce their emissions.





The principle of CBDR is essential for achieving sustainable development and for achieving the goals of the Paris Agreement. It is also fair and equitable, as it takes into account the different capabilities of countries.

Source: ForumIAS

### Q.6) Which of the following benefits Farmer Producers' Organisations (FPOs) may provide to farmers?

- 1. Increased bargaining power
- 2. Guaranteed income
- 3. Access to credit and other financial services
- 4. Increased land ownership

#### Select the correct code given below:

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

#### Answer: B

**Explanation** – Farmer Producers' Organisations (FPOs) are institutions of farmers that are formed for the purpose of undertaking economic activities related to agriculture and allied sectors. FPOs can be formed as producer companies under the Companies Act, 2013 or as cooperatives under the Cooperative Societies Act of the respective state. FPOs are promoted by the Government of India through the Ministry of Agriculture and Cooperation through various schemes and initiatives. The main objective of FPOs is to empower farmers and improve their income by providing them with a platform to collectively market their produce, procure inputs at competitive prices, and access credit and other financial services.

Some of the benefits of FPOs for farmers are: **Increased bargaining power:** FPOs can help farmers to get better prices for their produce by collectively marketing their produce, **Access to credit and other financial services:** FPOs can help farmers to access credit and other financial services from banks and other financial institutions, **Reduced risks:** FPOs can help farmers to reduce risks by providing them with insurance and other risk management services, **Improved productivity:** FPOs can help farmers to improve their productivity by providing them with technical assistance, training, and inputs, etc.

Source: ForumIAS

#### Q.7) With reference to Niemann-Pick disease (NPD) consider the following statements:

- 1. It is a group of rare and inherited metabolic disorders that affect the body's ability to process lipids or fats properly.
- 2. NPD is caused by mutations in genes that code for enzymes that break down cholesterol and other fatty substances.
- 3. People with NPD Type B can be cured with a gene therapy.

#### 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

Answer: A Explanation-

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**Statements 1 and 2** are correct. NPD is a group of rare and inherited metabolic disorders that affect the body's ability to process lipids or fats properly. NPD is caused by mutations in genes that code for enzymes that break down cholesterol and other fatty substances. These enzymes are called sphingomyelinase (NPC1 and NPC2). When these enzymes are not working properly, cholesterol and other fatty substances build up in the cells, which can lead to a variety of health problems. The severity of NPD varies depending on the type of mutation and the age at which the disease begins.

**Statement 3** is incorrect. People with NPD Type B cannot be cured with a simple gene therapy. There is no cure for NPD, and gene therapy is still in its early stages of development for this disease.

Source: ForumIAS

#### Q.8) Which of the following statements is correct regarding Estivation?

- a) It is a state of inactivity that some animals enter during the winter months, usually to conserve energy and endure cold temperatures.
- b) It is a state of inactivity or dormancy, often used in the context of plants or microorganisms during adverse conditions.
- c) It is a state of dormancy that takes place during the hot and dry summer months when temperatures are high and water and food resources may be scarce.
- d) It is a state of suspended development in animals, caused by environmental factors such as temperature or light.

#### Answer: C

**Explanation** – Estivation is also known as aestivation. It is a biological phenomenon during which some animals enter a prolonged state of dormancy or inactivity during hot and dry conditions. It serves as a survival strategy to conserve energy and water. Animals during estivation seek shelter in cool places like underground burrows, crevices, or cocoons. During this time, animals will also reduce their metabolic activity which in turn reduces their energy consumption. This helps them avoid extreme dryness and safe from predators.

Source: ForumIAS

# Q.9) The Supreme Court has ruled that payment of entry fee as well as variable annual license fee made by telecom companies will be considered as capital expenditure and not revenue expenditure. Which of the following may be the implication(s) of the ruling on the telecom companies?

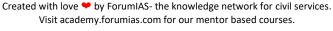
- 1. It will increase their tax liability, as capital expenditure is not tax-deductible in the year in which it is incurred.
- 2. It will increase their cash flow, as they will have to pay less taxes upfront.
- 3. It will make it more difficult for companies to raise capital from investors.

#### Select the correct code given below:

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

#### Answer: C

**Explanation** – Capital expenditure is incurred on the acquisition or creation of assets that will benefit the business for more than one accounting period. Revenue expenditure, on the other





hand, is incurred on day-to-day operations and is written off against revenue in the same accounting period.

The Supreme Court's ruling will have a number of implications for telecommunications companies in India. First, it will increase their tax liability, as capital expenditure is not tax-deductible in the year in which it is incurred. Second, it will reduce their cash flow, as they will have to pay more taxes upfront. Third, it will make it more difficult for them to raise capital, as investors will be less likely to invest in companies with higher tax liabilities and lower cash flow.

Source: ForumIAS

#### Q.10) With reference to "Leniency plus Programme" consider the following statements:

- 1. It is an initiative introduced by the Competition Commission of India (CCI) that is designed to encourage companies to disclose information about cartels and other anti-competitive practices in exchange for reduced penalties.
- 2. Under the Leniency Plus Programme, a company that has already applied for leniency in an ongoing cartel investigation can submit a separate application for leniency in another cartel investigation.

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

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

#### Answer: C Explanation –

**Statements 1 and 2** are correct. The Leniency Plus Programme is a new initiative introduced by the Competition Commission of India (CCI) in 2023. The program is designed to encourage companies to disclose information about cartels and other anti-competitive practices in exchange for reduced penalties.

Under the Leniency Plus Programme, a company that has already applied for leniency in an ongoing cartel investigation can submit a separate application for leniency in another cartel investigation.

If the CCI finds that the information provided in the second application is valuable and helps to detect and prosecute the second cartel, the company may be eligible for an additional reduction in its penalty in the first case.

The Leniency Plus Programme is a significant development in Indian antitrust law. It is expected to make it more difficult for companies to engage in cartels and other anti-competitive practices, and to make it easier for the CCI to detect and prosecute these practices.



