# **General Studies**

Current Affair Test (November-2025)

### 1. Solution: C

- Statement 1 is incorrect. It is not implemented solely by the Ministry of Cooperation. It is a collaborative effort with the National e-Governance Division (NeGD). Furthermore, while NABARD is a backer, it is one of several, including Amul, IFFCO, NAFED, KRIBHCO, and NCDC.
- Statement 2 is correct. This is the core principle of the cooperative model. Drivers ("Saarthis") are not contract workers but shareholders (owners), which entitles them to 100% of the fare, distinguishing it from aggregator models that take large commissions.
- Statement 3 is correct. The initiative leverages India's digital governance ecosystem. It is explicitly linked with DigiLocker, UMANG, and API Setu for secure identity verification and service access, enhancing transparency and integration.
- Statement 4 is incorrect. A defining feature of Bharat Taxi is the elimination of exploitative practices. There is "No Surge Pricing or Hidden Costs," ensuring transparent and affordable fares for commuters.

#### 2. Solution: B

- Statement 1 is correct. The aim of the CLAMP portal is to ensure time-bound, transparent, and equitable land management by digitizing records and payments.
- Statement 2 is correct. The portal is a centralized digital solution for managing the entire land acquisition process, which includes compensation and, explicitly, Rehabilitation and Resettlement (R&R) processes, ensuring fair and prompt implementation.
- Statement 3 is incorrect. The portal does not operate independently of state authorities. A key feature is its role in "Integration Across PSUs," which explicitly links coal PSUs, State departments, and district authorities to improve inter-agency coordination, not bypass them.

# 3. Solution: A

- Statement 1 is correct. A GI is a form of IPR, and it is governed in India by the Geographical Indications of Goods (Registration and Protection) Act, 1999.
- Statement 2 is incorrect. While the GI Registry is under the DPIIT, the issuing authority is specifically the Geographical Indication Registry located in Chennai, not New Delhi.
- Statement 3 is incorrect. The purpose of a GI tag is

not to set a Minimum Support Price (MSP). Its aim is to protect the product's authenticity, enhance its market value by linking it to its origin, and prevent unauthorized use of the name, thereby ensuring economic benefits for the local producers, but this is achieved through market differentiation, not price-fixing.

### 4. Solution: C

- Statement 1 is correct. The sanctuary is located in the West Singhbhum district of Jharkhand and is renowned for being one of Asia's largest Sal (Shorea robusta) forests.
- Statement 2 is correct. It is situated within the Singhbhum Elephant Reserve and it forms a vital ecological corridor connecting to Odisha and Chhattisgarh.
- Statement 3 is correct. The region is home to tribal communities including PVTGs and also holds nearly 26% of India's iron ore reserves, creating a conflict between conservation and mining.

### 5. Solution: C

- Statement 1 is incorrect. The Western Ghats are geologically older than the Himalayas. They originated during the breakup of the Gondwanaland supercontinent around 150 million years ago, while the Himalayas were formed much later due to the collision of the Indian and Eurasian tectonic plates (starting around 50 million years ago).
- Statement 2 is correct. The Palghat Gap, about 30 km wide near 11°N latitude, is the most prominent interruption in the otherwise continuous chain of the Western Ghats, separating the northern and southern sections.
- Statement 3 is incorrect. The Western Ghats range traverses six Indian states: Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.
- Statement 4 is correct. The Western Ghats region provides critical habitat for biodiversity, including large mammals. It shelters about 17% of the global tiger population (Panthera tigris), making it a crucial landscape for tiger conservation in India and worldwide.

- Statement 1 is incorrect. The scheme has specific, realistic targets, not a blanket 100% DVA for all segments. For instance, it aims to meet 100% domestic demand for Copper Clad Laminates, but 20% for PCBs, and 15% for Camera Modules. This indicates a phased and targeted approach to import substitution.
- Statement 2 is incorrect. The objective is to

promote domestic manufacturing, domestic value addition, and integrate Indian firms (not exclusively large-scale ones) with GVCs. The scheme's focus is on building the ecosystem, which often involves a mix of small, medium, and large enterprises.

Statement 3 is incorrect. The ECMS is designed to be complementary to other initiatives. It explicitly works in tandem with the PLI for Electronics and the India Semiconductor Mission (ISM). The combined goal is to build an end-to-end manufacturing chain, from raw materials and components (ECMS) to finished devices (PLI) and semiconductors (ISM).

### 7. Solution: D

- Statement 1 is incorrect. The functionary responsible for house-to-house distribution and collection of the Enumeration Form (EF) is the Booth Level Officer (BLO), not the District Magistrate (DM).
- Statement 2 is incorrect. Booth Level Agents (BLAs) are representatives of recognised political parties, not government officials. Their role is to assist in the process (like collecting forms and verifying voters) to ensure transparency from a political party perspective.
- Statement 3 is incorrect. The District Magistrate (DM) hears the first appeals against an ERO's decision. The Chief Electoral Officer (CEO) hears the second appeals, not the first.

#### 8. Solution: A

- Statement-I is correct. Agricultural and Processed Food Products Export Development Authority (APEDA) facilitated this specific export.
- Statement-II is correct. APEDA's purpose is precisely to promote the export of agricultural products, and facilitating shipments of GI-tagged items is a key strategy to enhance their market value and global recognition, which in turn provides economic benefits to the local producers.

# 9. Solution: B

- Statement 1 is incorrect. Operation Trishul is not a bilateral exercise with France. It is a major triservices (Army, Navy, and Air Force) military exercise conducted by India along its western frontier. It is an internal exercise to test joint operational capabilities.
- Statement 2 is correct. The exercise is held in Rajasthan and Gujarat, with a specific focus on Sir Creek and the Rann of Kutch. This location is strategically chosen to test operations in desert, creek, and maritime zones, including amphibious landings and naval drills off the Saurashtra coast.
- Statement 3 is correct. A significant aim of the exercise is to demonstrate Atmanirbhar Bharat (self-reliance). This is achieved through the deployment and testing of indigenous weapons

and systems, including drones, ISR systems, AIbased targeting, and joint command networks. It also involves advanced systems like the S-400 to test integrated air defence readiness.

### 10. Solution: B

- Statement 1 is correct. The lake is a natural floodplain lake. It is formed by the confluence of several rivers, including the Khuga, Nambul, Imphal, and Thoubal, whose sediments contribute to the formation of phumdis.
- Statement 2 is correct. The lake faces severe ecological degradation. Due to threats like pollution, sedimentation, agricultural runoff, and unregulated land use, it was listed in the Montreux Record, which identifies wetlands of international importance that are under threat.
- Statement 3 is incorrect. Loktak Day (October 15th) is celebrated to honor the lake's ecological and cultural significance for the people of Manipur.

#### 11. Solution: A

- Statement 1 is incorrect. The International Civil Aviation Organization (ICAO) was established in 1944 under the Convention on International Civil Aviation, commonly known as the Chicago Convention, not the Warsaw Convention of 1929 which dealt with unifying rules related to international carriage by air. ICAO became a specialized agency of the United Nations in 1947.
- Statement 2 is incorrect. The Standards and Recommended Practices (SARPs) are automatically legally binding. While member states are expected to conform to ICAO Standards, the Chicago Convention allows a state to notify the Council if it finds it impracticable to comply. This notification of difference is a key principle of the convention, recognizing national sovereignty. Therefore, the standards are not binding without some form of domestic adoption or in cases where no difference is filed.
- Statement 3 is correct. The ICAO Council is the permanent governing body of the organization. It is composed of 36 member states elected by the ICAO Assembly for a three-year term. The Assembly, which is the sovereign body, meets at least once every three years.

- Statement 1 is correct. A key and legally binding component of the TEPA is the commitment from the EFTA states to invest \$100 billion in India over 15 years, which is linked to the creation of 1 million direct jobs. This is a novel feature for an Indian FTA.
- Statement 2 is incorrect. The TEPA facilitates the mobility of professionals (Mode 4 of services supply) but does not grant blanket visa-free access. It establishes frameworks for Mutual Recognition Agreements (MRAs) in professions like nursing

- and architecture, which streamlines the process for professionals to work in EFTA countries but is subject to specific conditions and regulations of each member state.
- Statement 3 is correct. The agreement incorporates intellectual property standards that are "TRIPSplus", meaning they go beyond the baseline requirements of the WTO's TRIPS agreement. However, India successfully negotiated safeguards to protect its generic drug manufacturing, such as provisions to prevent "evergreening" of patents, ensuring access to affordable medicines is not unduly hampered.
- Statement 4 is incorrect. The EFTA is an intergovernmental organisation that operates in parallel with, but is separate from, the European Union (EU). None of the EFTA members (Switzerland, Norway, Iceland, Liechtenstein) are part of the EU. They participate in the EU's single market through separate agreements.

- Statement 1 is incorrect. Polymetallic Sulphides (PMS) are not formed by sedimentation of organic matter. They are formed through hydrothermal processes. Cold seawater seeps into the ocean crust, gets heated by magma, and is then ejected as hot, mineral-rich fluid through vents. As this fluid mixes with cold seawater, minerals precipitate and form deposits. Polymetallic nodules, not sulphides, are found on abyssal plains.
- Statement 2 is correct. The formation of PMS is intrinsically linked to hydrothermal vents, which are commonly found along mid-ocean ridges, especially slow-spreading ones like the Carlsberg Ridge and Central Indian Ridge. The tectonic activity and heat flow in these zones create the necessary conditions for vent formation.
- Statement 3 is incorrect. While PMS deposits contain various metals, they are particularly rich in copper, zinc, and lead, along with significant amounts of gold and silver. Polymetallic nodules, a different type of deep-sea mineral resource, are the ones primarily composed of manganese and iron oxides. This distinction is crucial.

#### 14. Solution: B

The Carlsberg Ridge is a significant feature of the Indian Ocean's seafloor topography.

- It is a mid-ocean ridge, a divergent plate boundary where new oceanic crust is formed through seafloor spreading.
- Specifically, it is characterized as a slow-spreading ridge, with a rate of 2.4-3.3 cm/year, leading to rugged topography and a distinct median valley.
- Geographically, it extends from a triple junction of tectonic plates towards the Gulf of Aden and acts as a natural boundary separating the Arabian

- Sea to its northeast from the Somali Basin to its southwest.
- This location is known for hydrothermal vent systems, which are rich in Polymetallic Sulphide (PMS) deposits, making it a target for deep-sea mineral exploration.

#### 15. Solution: B

- The International Civil Aviation Organization (ICAO) was established as a direct outcome of the Convention on International Civil Aviation, which was signed in Chicago on December 7, 1944. As World War II was nearing its end, the Allied powers recognized the urgent need for a framework to govern the anticipated explosion in international civil air travel.
- The Chicago Conference was convened to establish rules and standards for a safe, orderly, and fair system of global aviation. ICAO was created to oversee the implementation of this convention and to develop international standards and recommended practices.
- While it later became a specialized UN agency in 1947, its creation predates the UN's formal establishment and was specifically driven by the Chicago Convention.

### 16. Solution: D

- Statement 1 is incorrect. This is India's second contract for PMS exploration. The first contract was signed in 2016 for an area in the Central and Southwest Indian Ridges. India also has an earlier contract for Polymetallic Nodules in the Central Indian Ocean Basin.
- Statement 2 is incorrect. The contract, granted under the United Nations Convention on the Law of the Sea (UNCLOS), provides exclusive rights for exploration of mineral resources on the seabed in the designated area. It does not confer any sovereign rights over the water column or for activities like fishing, which remain part of the high seas.
- Statement 3 is correct. With this second contract for Polymetallic Sulphides, India has become the first country to hold two such contracts from the ISA. This also gives India the largest allocated exploration area for PMS globally, underscoring its growing capabilities in deep-sea exploration.
- Statement 4 is incorrect. The Carlsberg Ridge is a prominent mid-ocean ridge located in the Indian Ocean, separating the Arabian Sea and the Somali Basin. It is not in the Atlantic Ocean.

# 17. Solution: C

Statement 1 is correct. India is a founding member of ICAO, having been part of the Chicago Convention in 1944. It has maintained an uninterrupted presence on the ICAO Council since its formation, highlighting India's significant and consistent contribution to global civil aviation governance.

- Statement 2 is correct. ICAO develops and implements the Global Aviation Safety Plan (GASP), which serves as a high-level strategic roadmap for enhancing aviation safety worldwide. It assists states in managing their safety oversight responsibilities and promotes a coordinated approach to reducing accident risks.
- Statement 3 is correct. Under its strategic objective for Environmental Protection, ICAO is actively involved in efforts to make aviation more sustainable. It promotes policies and standards aimed at reducing the carbon footprint of air travel, including encouraging the development and deployment of sustainable aviation fuels (SAFs) and other climate-friendly technologies and practices.

- This is correct. The agreement has a dedicated chapter on Trade and Sustainable Development, which emphasizes green growth, social inclusion, environmental protection, encouraging collaboration in areas like renewable energy.
- This is correct. While adopting TRIPS+ standards for intellectual property, the TEPA includes crucial safeguards for India's public health interests. These provisions are designed to prevent the evergreening of patents, thereby supporting the production and accessibility of affordable generic medicines.
- This is correct. The agreement aims to enhance trade in services by facilitating professional mobility. It includes provisions for Mutual Recognition Agreements (MRAs) in professions such as nursing, architecture, and chartered accountancy, which would streamline the process for qualifications to be recognized across borders.
- This is incorrect. A Free Trade Agreement like TEPA focuses on reducing trade barriers, promoting investment, and harmonizing regulations. It does not involve monetary integration or the establishment of a common currency, which is a feature of much deeper economic unions.

### 19. Solution: D

The nomination process for the Nobel Peace Prize is quite broad, allowing for a diverse range of nominators to ensure global representation. According to the statutes of the Nobel Foundation, all the categories listed are eligible to submit nominations.

- (a) Members of national parliaments and national governments (cabinet members/ministers) of sovereign states as well as current heads of state are qualified nominators.
- (b) University rectors; professors of social sciences, history, philosophy, law and theology; directors of peace research institutes and foreign policy institutes are also eligible.
- (c) Persons who have been awarded the Nobel

- Peace Prize (former laureates) can nominate others.
- Other eligible nominators include members of The International Court of Justice in The Hague and The Permanent Court of Arbitration in The Hague, and members of international boards of organizations that have received the prize.

#### 20. Solution: C

- (a) While the non-participation of countries like China is a long-standing issue, the most pressing current challenge relates to the nature of technology itself.
- (b) The consensus-based model is a feature, not a bug, designed to respect national sovereignty. While it can be slow, the core issue is what it is failing to regulate, not just the decision-making process.
- (c) The Wassenaar Arrangement was designed in the 1990s to control the physical export of goods. Its framework struggles to cope with the modern digital economy where dual-use technology is often delivered as a service (SaaS), through the cloud, or as intangible software. This creates loopholes that allow for the proliferation of digital surveillance tools and other sensitive technologies, bypassing traditional export controls.
- (d) The arrangement has always been voluntary and has never had a legal enforcement mechanism. This is a foundational aspect of its design, not a new challenge prompting reform.

#### 21. Solution: B

The Gupta temples are some of the earliest surviving examples of structured temple architecture in India, marking a transition from rock-cut caves to freestanding temples.

- Statement 1 is incorrect: Gupta temples primarily followed the Nagara style of architecture, which is characterized by curvilinear shikharas (towers), square sanctums (garbhagriha), and axial alignment. The Dravidian style, on the other hand, belongs to South India and is associated with large temple complexes, towering gopurams, and intricate pillared halls, which were not typical of Gupta temples.
- Statement 2 is correct: Gupta temples are renowned for their intricate carvings, shikharas, and artistic excellence. This period is often referred to as the "Golden Age" of Indian art and architecture, as temples like Dashavatara Temple (Deogarh) and Parvati Temple (Nachna Kuthara) showcase highly refined sculptures and elaborate relief work.
- Statement 3 is incorrect: Unlike later temple constructions, Gupta temples were primarily built using brick and stone. While some sandstone was used, granite was not the primary material, as it was more commonly associated with Dravidian temple architecture in the South.

# 22. Solution: D

What is Antimatter?

Antimatter is a type of matter composed of antiparticles, which have the same mass as ordinary matter particles but possess opposite electric charges. For example, the antimatter counterpart of an electron (which has a negative charge) is the positron, which has the same mass as an electron but a positive charge. Similarly, the antiproton is the antimatter equivalent of a proton, having the same mass but an opposite, negative charge.

### Example:

- Matter: A hydrogen atom is made of one proton (positively charged) and one electron (negatively charged).
- Antimatter: The antimatter version, antihydrogen, consists of one antiproton (negatively charged) and one positron (positively charged).

# Difference from Matter:

The key difference between matter and antimatter lies in the charges of their particles. When matter and antimatter come into contact, they annihilate each other, releasing energy in the process. This process is governed by the same fundamental forces, but the charge reversal leads to the annihilation phenomenon.

Despite equal amounts of matter and antimatter being produced at the universe's birth, matter dominates today. Scientists are still exploring why this imbalance occurred.

#### 23. Solution: B

Statement 1 is correct as A1 beta-casein is found mainly in cow breeds from northern Europe, such as Holstein and Friesian.

Statement 2 is incorrect because A2 milk is distinct because it contains only the A2 variant of beta-casein, not both A1 and A2.

Statement 3 is correct as A2 beta-casein is found in breeds like Guernsey and Jersey cows.

# 24. Solution: C

The mRNA vaccines carry genetic instructions in the form of mRNA, which does not integrate into the host genome but rather serves as a template for cells to produce specific viral proteins, such as the spike protein of the coronavirus. These proteins are then displayed on the cell surface, triggering the immune system to produce antibodies and activate T cells, which provide immunity against the virus.

#### 25. Solution: B

Statement 1 is correct because the influx of freshwater from melting Arctic ice can disrupt the thermohaline circulation, which drives global ocean currents and regulates climate patterns.

Statement 2 is also correct, as the melting of permafrost releases methane, a powerful greenhouse gas that significantly contributes to global warming.

Statement 3 is incorrect because the melting of

Antarctic ice, especially from its vast ice sheets, has a profound impact on global sea levels, potentially leading to significant sea level rise.

### 26. Solution: B

Statement 1 is correct because the elongated tortoise is native to Southeast Asia and is not commonly found in India.

Statement 2 is also correct, as the species is listed as "Critically Endangered" on the IUCN Red List due to severe population declines caused by habitat destruction and illegal wildlife trade.

However, statement 3 is incorrect, as the tortoise was spotted in the Damdama area in the Aravallis, not Sultanpur National Park.

### 27. Solution: B

Statement 1 is correct as amphibious operations require coordination between land, naval, and, in many cases, air forces to project military power from the sea onto land.

Statement 3 is also correct, as the Indian Armed Forces have developed an Amphibious Operations Doctrine that provides guidance for conducting such operations, especially in the strategically vital Indian Ocean Region.

However, statement 2 is incorrect because amphibious operations can be conducted both during wartime and peacekeeping missions.

# 28. Solution: D

- Statement 1 is correct The vacuum-sealed tube minimizes air drag, allowing high-speed travel.
- Statement 2 is correct While it has fewer mechanical components than rail networks, track maintenance is still required for safety.
- Statement 3 is correct Magnetic levitation (maglev) eliminates ground friction, enabling smoother travel.

What is Hyperloop Technology?

- Hyperloop is an ultra-high-speed transportation system using magnetic levitation (maglev) and near-vacuum tubes for travel at speeds up to 1,220 km/h.
- Working Mechanism:
  - Uses low-pressure tubes with built-in vacuums to reduce air resistance.
  - Magnetic levitation allows pods to hover, reducing friction.
  - Electromagnetic propulsion drives the pod forward.
- Key Features:
  - Energy-efficient and low emissions transportation.
  - Faster than air travel on shorter routes.
  - Reduces road congestion and noise pollution.
- Origin:
  - Concept proposed by Elon Musk in 2013 through the Hyperloop Alpha white paper.

• Developed as open-source technology for research worldwide.

#### 29. Solution: B

- Siddha medicine is one of the oldest traditional systems of healing, primarily practiced in South India. It is deeply rooted in the concept that human beings are made up of five basic elements—earth, water, fire, air, and ether—and maintaining the balance among these is essential for health.
- Statement 1 is correct, as this elemental theory forms the core of Siddha diagnostics and therapeutics.
- Statement 2 is incorrect because while herbs are extensively used, Siddha medicine also utilizes a wide range of metals, minerals, and animal products—processed carefully through traditional purification methods-to enhance efficacy and longevity of treatments.
- Statement 3 is also incorrect because Siddha is a holistic system; it addresses not just physical illnesses but also emphasizes mental and spiritual well-being, aiming for a balanced lifestyle that integrates yoga and meditation practices.

### 30. Solution: A

- Green hydrogen refers to hydrogen produced using electrolysis powered by renewable energy sources like solar and wind. This process splits water into hydrogen and oxygen without releasing greenhouse gases, making it an eco-friendly alternative to traditional hydrogen production methods.
- Statement 1 is correct, as the clean production process is central to green hydrogen.
- Statement 2 is also correct, as green hydrogen significantly reduces carbon emissions compared to grey hydrogen, which is typically derived from natural gas and releases substantial CO2 emissions—around 10 kg of CO2 per kg of hydrogen—while green hydrogen emissions can be as low as 1-2 kg or even negligible, depending on the energy source.
- Statement 3 is incorrect because the Bureau of Energy Efficiency (BEE) is not under the Ministry of New & Renewable Energy but rather under the Ministry of Power. The MNRE plays a key role in renewable energy initiatives, but BEE's administrative control lies elsewhere.

# 31. Solution: A

- Statement 1 is incorrect. The ECMS is an initiative under the Ministry of Electronics and Information Technology (MeitY), not the Ministry of Commerce and Industry. Its primary aim is to strengthen India's domestic component-level manufacturing ecosystem and reduce import dependence, rather than just focusing on exports.
- Statement 2 is incorrect. The scheme offers differentiated turnover-linked, capex, and hybrid incentives, not a uniform one. The tenure for the

- turnover-linked incentive is 6 years (with a 1-year gestation), and the capex incentive is for 5 years, not a flat ten-year period. This differentiated approach is designed to offset specific manufacturing disabilities for different types of components.
- Statement 3 is correct. The scheme explicitly targets segments like Printed Circuit Boards (PCBs), Camera Modules, Copper-Clad Laminates, Polypropylene Films, and capital equipment for manufacturing these components. This focus is strategic to build domestic capacity in areas with high import dependence.

#### 32. Solution: C

- Statement-I is correct. A key aim of the mission is to make India self-reliant (Aatmanirbhar) in pulse production. This inherently involves reducing import dependency from nations like Myanmar and Canada, which are significant sources of India's pulse imports. The goal is to boost domestic output to replace these imports.
- Statement-II is incorrect. The mission's features specify 100% assured procurement for Tur (Arhar), Urad, and Masoor—the three focus crops of the mission—by NAFED and NCCF. It does not extend this guarantee to all pulse crops (like moong, chana, etc.) grown in the country, although they are part of the broader pulse ecosystem.

# 33. Solution: D

- Statement 1 is incorrect. While it is a Centrally Sponsored Scheme, the funding pattern for general states is 60:40 (Centre:State), not 75:25. The 90:10 ratio applies to NE & Himalayan States, and it is 100% Central support for UTs without a legislature. The 60:40 ratio is standard for many
- Statement 2 is incorrect. The scheme's objective is to shift from rote methods to inquiry-driven, experiential pedagogy and from exam-centric grading to continuous, competency-linked evaluation, as mandated by the NEP 2020.
- Statement 3 is incorrect. Selection is not automatic. Schools are selected through a competitive challenge-mode. While UDISE+ data is used in the initial shortlisting, the process also involves field verification and approval by an expert committee, ensuring that only schools meeting the criteria are chosen to become "lighthouse schools."

- Statement 1 is incorrect. While Dogri is an Indo-Aryan language descended from Sanskrit and was once written in the Dogra Akkhar script (during Maharaja Ranbir Singh's time), it is no longer written exclusively in it. In the 20th century, the Devanagari script largely replaced Dogra Akkhar for writing Dogri.
- Statement 2 is correct. Dogri was granted constitutional recognition and added to the Eighth Schedule in 2003 (through the 92nd Constitutional

- Amendment Act). The 2003 amendment also added Bodo, Maithili, and Santhali alongside Dogri.
- Statement 3 is correct. The language's primary linguistic base is the Jammu region of the UT of Jammu & Kashmir. It is also spoken by communities in adjoining areas, including Himachal Pradesh and northern Punjab, reflecting the historical and cultural spread of the Dogra community.

- Statement 1 is incorrect. While they are a Tibeto-Burman group native to the Tirap district, they are not found only there. The community also resides in parts of Myanmar's Naga Self-Administered Zone, highlighting cross-border ethnic continuity.
- Statement 2 is incorrect. The Ollo social system is patrilineal and patriarchal. They are governed by hereditary chiefs (Lowang) and leaders (Ngongpa), with kinship and land ownership traced through the male line.
- Statement 3 is correct. The Woraang (Voorang) Festival is a vibrant agrarian celebration of the Ollo tribe, marked by songs, dances, and rituals that symbolize community unity and prosperity.

### 36. Solution: B

- Statement 1 is incorrect. The process is initiated by the Union Law Minister, not the incumbent CJI. The Law Minister seeks the recommendation of the outgoing CJI at least one month before their retirement. The CJI's role is to recommend, not to initiate the process.
- Statement 2 is incorrect. Article 124(2) governs the appointment but does not explicitly state that the "senior-most" judge must be appointed. The "seniority principle" is a convention, not a codified constitutional law. The convention has been upheld (with a few exceptions in the past) and reinforced by Supreme Court judgments (e.g., Second Judges Case), but it is not written into Article 124(2) itself.
- Statement 3 is correct. This describes the final stages of the process. The CJI's recommendation is submitted by the Law Minister to the Prime Minister. The Prime Minister then advises the President, who formally appoints the CJI. This reflects the constitutional position where the President acts on the advice of the Council of Ministers (headed by the PM).

# 37. Solution: B

- Statement 1 is incorrect. Loktak Lake is the largest freshwater lake in South Asia, not saltwater. It is a Ramsar Site.
- Statement 2 is correct. The lake's most unique feature is the phumdis, which are floating mats of vegetation, soil, and organic matter. These are described as natural formations, created by the sediments and organic matter from the rivers that

- feed the lake.
- Statement 3 is correct. The lake sustains the Keibul Lamjao National Park, which is the world's only floating national park (as it rests on a large phumdi). This park is the last natural habitat of the Sangai deer (brow-antlered deer), which is the state animal of Manipur and is listed as endangered.

# 38. Solution: A

- Statement-I is correct. The primary aim of the mission: to cut import dependence and bolster domestic capacity, aligning with national health priorities and the Atmanirbhar Bharat vision.
- Statement-II is correct. It provides significant funding (₹5–25 crore per project) to foster collaborations between startups, MSMEs, academia, and industry. This funding is directed at a broad scope of technologies, including diagnostics, AI/ML tools, and implants.
- Statement-II is the correct explanation for Statement-I.

# 39. Solution: B

- Statement 1 is correct. The 2030 edition will mark the "100th anniversary of the Games' inception in Hamilton, Canada (1930)."
- Statement 2 is incorrect. The Executive Board recommends, but the "final decision will be taken at the Commonwealth Sport General Assembly in Glasgow."
- Statement 3 is incorrect. The games began as the "British Empire Games (1930)" and were later renamed the Commonwealth Games in 1978.
- Statement 4 is correct. India hosted the games "once before, the 2010 New Delhi Games." Ahmedabad would be the second host city.

# 40. Solution: D

- Statement 1 is incorrect. The report explicitly notes that climate change replaced hunting as the most widespread threat to Asian sites.
- Statement 2 is incorrect. The report highlights a worsening The share of sites with "significant concern" has risen from 26% (2020) to 30% (2025), not declined.
- Statement 3 is incorrect. The report gives a detailed breakdown for India. Only 3 sites (Western Ghats, Manas, Sundarbans) are under "Significant Concern." Khangchendzonga NP is specifically mentioned as being rated "Good," and four other sites are "Good with Some Concerns."

### 41. Solution: C

The Canary Islands are an archipelago in the Atlantic Ocean, located about 1,300 km south of mainland Spain and west of the African coast (Morocco). They were formed by volcanic eruptions millions of years ago, which gave them their unique landscape. The islands have a subtropical climate with little seasonal variation.

- Statement 1 is correct. Thermobaric weapons operate through a two-stage explosion First, they disperse a fine aerosol of fuel into the surrounding air. Then, this fuel cloud is ignited, producing an intense explosion that creates a high-temperature blast wave and consumes surrounding oxygen.
- Statement 2 is incorrect. While thermobaric weapons have devastating effects in enclosed or populated environments, they are not explicitly designed to target civilians. Their use against civilians or civilian infrastructure would be a violation of international humanitarian law, particularly the Geneva Conventions.
- Statement 3 is incorrect. Although pressure changes from the blast wave contribute to the destruction—causing lung damage and structural collapse—the weapons also inflict severe harm through the intense heat, which incinerates oxygen and can cause lethal burns. Both heat and pressure contribute substantially, making it inaccurate to say damage is primarily through pressure alone.

# 43. Solution: A

All three statements are incorrect.

- Dust storms are most frequent during the premonsoon season (April–June), not winter, when rising temperatures and dry surface conditions prevail.
- The Thar Desert is actually a major source of dust due to its loose sandy soils and sparse vegetation.
- Furthermore, dust storms usually occur during daytime when surface heating leads to convection and wind turbulence, not during night inversions which suppress vertical air movement.

### 44. Solution: B

- Statement 1 wrongly claims the Honolulu Commitment is legally binding. In reality, it is a voluntary declaration adopted in 2011 during the Fifth International Marine Debris Conference. It emphasizes multi-stakeholder collaboration and integrated approaches to tackle marine litter but lacks legal enforceability or penalties for noncompliance.
- Statement 2 is correct. The UNEP Clean Seas Campaign, launched in 2017, is a global initiative aimed at influencing both government policies and private sector behavior to reduce plastic consumption. It advocates eliminating single-use plastics, promoting sustainable alternatives, and spreading public awareness to shift consumption patterns.
- Statement 3 is correct. Sustainable Development Goal (SDG) 14.1 explicitly sets the target year as 2025 for preventing and significantly reducing marine pollution, especially from land-based sources, such as agricultural runoff and wastewater.

#### 45. Solution: A

- Statement 1 is correct. Hybrid paddy is known for early maturity, typically within 125–130 days, unlike traditional varieties that may take 145+ days. This shorter growing period is particularly helpful in reducing water usage and preparing the field early for the Rabi season.
- Statement 2 is incorrect. Contrary to producing more stubble, many hybrid varieties are engineered to reduce stubble biomass, making them beneficial in minimizing post-harvest burning that causes air pollution in northern India.
- Statement 3 is also incorrect. Hybrid paddy varieties are not aromatic, and are mainly non-Basmati, developed for commercial yield maximization rather than for aroma or export appeal. Export-focused varieties like Basmati are typically not hybrids but are open-pollinated and grown for niche markets.

#### 46. Solution: C

- Equatorial Plasma Bubbles (EPBs) are large-scale depletions in ionospheric plasma density that occur after sunset in equatorial regions. These bubbles are caused by plasma instabilities in the F-region of the ionosphere, leading to irregularities that disrupt the smooth propagation of radio signals.
- Statement-I is correct: EPBs are known to affect satellite navigation systems like GPS by inducing signal scintillation—rapid fluctuations in signal amplitude and phase—leading to positioning errors, delays, and even complete signal loss.
- Statement-II is incorrect: EPBs reduce, not increase, plasma density. Instead of enhancing signal reflection, they scatter or refract radio signals, degrading their integrity. The depletion causes inhomogeneities in the ionosphere, making satellite communication and navigation less reliable, especially during geomagnetic disturbances.

### 47. Solution: C

South Korea is a peninsular nation in East Asia, surrounded by key strategic water bodies. The Yellow Sea lies to its west, separating it from China. To the east is the Sea of Japan (referred to by South Korea as the East Sea), while the East China Sea lies to the south, bordering Jeju Island. These seas have immense geostrategic importance due to naval routes, fishing zones, and military tensions, particularly involving China, Japan, and North Korea.

# 48. Solution: D

The Democratic Republic of the Congo (DRC) is globally significant for its Congo Basin, which is the second-largest tropical rainforest in the world after the Amazon. Spanning across several central African nations, over 60% of the Congo Basin lies within the DRC. It plays a critical role in carbon sequestration,

biodiversity conservation, and climate regulation. The region is a carbon sink, essential for global climate goals. It also supports endangered species like the bonobo, forest elephant, and okapi.

### 49. Solution: B

Statement 1 is correct. The IBBI regulates insolvency professionals, insolvency professional agencies, and other entities related to bankruptcy under the Insolvency and Bankruptcy Code (IBC), 2016. Its regulatory oversight ensures the proper functioning of the professionals involved in insolvency and liquidation processes.

Statement 2 is incorrect. The Chairperson and non-exofficio members of IBBI serve for a term of five years or until they reach the age of 65, whichever is earlier, not three years or until 60.

Statement 3 is correct. IBBI enforces regulations related to both corporate and individual insolvency cases, ensuring that the processes follow the guidelines laid down in the IBC, 2016. This enables a time-bound resolution of insolvency cases, ensuring a streamlined process for creditors and debtors alike.

### 50. Solution: C

- The Chagos Archipelago is a group of over 60 tropical islands situated in the central Indian Ocean, strategically located about 1,600 km south of India's southern coast and nearly equidistant from East Africa and Southeast Asia.
- It forms part of the British Indian Ocean Territory (BIOT), although its sovereignty is contested by Mauritius, which claims the territory as part of its own.
- The archipelago is of immense geopolitical and military significance—Diego Garcia, its largest island, hosts a major U.S. military base that plays a crucial role in American naval operations across the Indo-Pacific.
- The region also holds ecological importance due to its rich marine biodiversity and coral reefs.
- It is not located in the Arabian Sea, the Central Pacific Ocean, or the Southern Atlantic Ocean.

#### 51. Solution: A

Statement 1 is incorrect.

- The BIMSTEC Charter, adopted in 2022, was a milestone that formalized the grouping, granting it legal identity and outlining governance protocols, including rotational chairmanship and sectoral responsibilities.
- The 6th Summit highlighted people-centric regionalism, focusing on educational, youth, and cultural linkages as vital for deepening cooperation beyond trade and security.
- BIMSTEC decisions are taken through consensus, akin to SAARC's model, though BIMSTEC has shown more agility.
- Statement 1 is incorrect China is neither a member nor an observer in BIMSTEC. The

grouping connects South and Southeast Asia without Chinese involvement, offering India an alternative to Chinese-led regional forums like the Lancang-Mekong or BRI initiatives.

#### 52. Solution: B

- The Hadlus are low-lying swampy grasslands within the park that become marshy during monsoons and dry in summer. These are ecologically crucial as they offer high-quality forage and water, attracting elephants, gaurs, and deer, particularly during dry spells.
- Statement 2 is correct Nagarahole lies on the eastern edge of the Nilgiri Biosphere Reserve and is contiguous with Bandipur (south), Wayanad (southwest), and Mudumalai (southeast).
- Statement 3 is incorrect the Kabini River does not originate in Nagarahole. It forms part of the park's northern boundary, flowing eastward, ultimately joining the Cauvery River, which drains into the Bay of Bengal not the Arabian Sea. Its origin lies in Wayanad, Kerala. Thus, while the river is ecologically crucial to the park, it is a boundary river, not an originating one.

# Objectives of BIMSTEC:

- Promote economic cooperation among countries bordering the Bay of Bengal.
- Facilitate sectoral collaboration in trade, technology, energy, transport, and environment.
- Address shared regional challenges including terrorism, poverty, and climate change.
- Foster regional connectivity through cross-border infrastructure and digital links.
- Enable people-to-people ties, cultural exchanges, and academic partnerships.

# Key Features of BIMSTEC:

- Bridge between SAARC and ASEAN: Offers a unique geostrategic platform uniting South and Southeast Asia.
- Sector-led cooperation: Began with six sectors in 1997, now streamlined to seven core sectors post-2021 reforms.
- Focus on Security and Trade: Includes counterterrorism, disaster management, and maritime cooperation.
- Vision-based Agenda: 6th Summit to adopt Bangkok Vision 2030 and Maritime Transport Agreement.
- Institutional Strengthening: BIMSTEC Charter signed in 2022; Secretariat operational since 2014.

# 53. Solution: C

- The Pradhan Mantri Janjatiya Unnat Gram Abhiyan (PMJUGA) is a holistic initiative launched with the core objective of accelerating development in tribal-dominated villages by ensuring saturation of various centrally sponsored schemes.
- The programme specifically targets Scheduled Tribe-majority villages, aiming to bridge

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critical gaps in access to basic amenities such as sanitation, education, health, drinking water, housing, electricity, and financial inclusion.

- Seventeen key Union Ministries are working in coordination under this mission to provide integrated and focused interventions.
- While components like forest-based livelihoods and natural resource management are included in the larger ecosystem approach of the initiative, they are supportive elements rather than the central aim.
   The overarching focus remains the comprehensive socio-economic upliftment of tribal communities by ensuring that no basic welfare scheme is left out of reach in these villages.
- Therefore, the most accurate description of its main goal is saturation of basic schemes in tribalmajority regions.

# 54. Solution: A

Statement 2 is incorrect.

The Lokpal and Lokayuktas Act (2013) was enacted to address corruption at both the national and state levels in India. It mandates the establishment of Lokayuktas in all Indian states to investigate allegations of corruption against public officials at the state level. This helps decentralize the anti-corruption mechanism, ensuring that states have an independent body to handle complaints.

At the national level, the Lokpal deals with corruption cases involving central government officials, ensuring accountability at the federal level. The distinction between Lokpal (national) and Lokayuktas (state) highlights the dual approach to tackling corruption across different levels of governance.

However, while Lokayuktas can investigate corruption cases and make recommendations, they do not have judicial powers to enforce their decisions, meaning their recommendations are not legally binding. This limits their ability to ensure corrective actions are taken, as the implementation of their recommendations depends on the government's discretion.

### 55. Solution: B

The India Semiconductor Mission (ISM) offers a 50% capital expenditure subsidy to encourage domestic semiconductor manufacturing, making statement 2 correct.

The primary goal of ISM is to reduce India's dependency on semiconductor imports, especially for critical technologies, making statement 4 correct.

However, ISM is not specifically part of the Digital India Initiative (statement 1) and does not solely focus on both civilian and defense manufacturing (statement 3), as its scope is broader, covering the overall semiconductor ecosystem. Therefore, only statements 2 and 4 are correct.

#### 56. Solution: B

Statement 1 is incorrect: The Arctic Council is a

high-level intergovernmental forum but not a treatybased body and does not handle territorial or resource claims. It promotes cooperation among Arctic states and Indigenous communities on environmental and sustainable development issues.

Statement 2 is correct: The United Nations Convention on the Law of the Sea (UNCLOS) governs maritime entitlements, including Exclusive Economic Zones (EEZs) and continental shelf claims in the Arctic. As sea ice retreats, countries are submitting claims for extended continental shelves, particularly for areas rich in hydrocarbons.

Statement 3 is correct: The Northeast Passage, also referred to as the Northern Sea Route, runs along Russia's Arctic coast and connects the North Atlantic to the Pacific Ocean, offering a shorter shipping route between Europe and Asia compared to traditional ones through the Suez Canal.

#### 57. Solution: B

- Statement 1 is incorrect: Rights to exploit Arctic resources are determined by UNCLOS, which allows coastal states to claim exclusive economic zones (EEZs) and potentially extended continental shelves. Hence, rights are not equally distributed but based on scientific and legal claims.
- Statement 2 is incorrect: Despite its harsh climate, the Arctic harbors significant biodiversity, including polar bears, walruses, Arctic foxes, migratory birds, cold-water corals, and diverse plankton ecosystems.
- Statement 3 is correct: Permafrost in the Arctic contains large quantities of methane and carbon dioxide. When it thaws due to rising temperatures, it releases these gases, which are potent contributors to climate change.

#### 58. Solution: C

- In shallow coastal areas, underwater cables are vulnerable to disturbances from ship anchors, trawling nets, dredging, and other human activities.
- To minimize the risk of damage, cables are buried under the seabed using specialized ploughs or water jetting systems.
- However, in deeper oceanic zones, these risks are minimal due to the absence of large-scale human activity and the technical difficulty and cost of burial at those depths. Consequently, cables are usually laid directly on the ocean floor beyond the continental shelf.
- The burial has no impact on data transmission speed or bandwidth, which are instead determined by fiber-optic technology and repeaters.
- Submarine detection and security considerations exist but are not the main reason for cable burial.

# 59. Solution: B

• Only statement 3 is correct. Tariffs serve dual purposes: governments collect them as revenue and also use them to regulate foreign trade by

- making imports more expensive, thus protecting domestic industries.
- Statement 1 is incorrect. While WTO members must notify and justify tariff changes, WTO does not approve tariffs per se. Countries retain sovereign rights to impose tariffs within their committed bound rates.
- Statement 2 is also incorrect. Under MFN rules, WTO members are required to apply the same tariff rates to all members, ensuring non-discrimination.

Price Support Scheme (PSS): This scheme ensures that the government directly procures crops at the Minimum Support Price (MSP) when market prices fall below a threshold. It primarily targets pulses and oilseeds to stabilize prices for farmers.

Price Deficit Payment Scheme (PDPS): Under PDPS, the government compensates farmers for the difference between the MSP and the actual market price. This scheme applies when the market price is lower than the MSP but does not involve direct procurement.

Market Intervention Scheme (MIS): MIS is invoked when there is an overproduction or glut in the market for certain commodities, causing a drop in prices. It helps stabilize prices by removing surplus stock from the market.

Price Stabilisation Fund (PSF) maintains buffer stocks of commodities like pulses and onions.

# 61. Solution: A

- The primary strategic significance of the MCPS lies in its contribution to Atmanirbhar Bharat (self-reliance). While the system does have advanced technical features, its core importance is the elimination of dependence on imported parachute systems for special operations. This reduces strategic vulnerability, as access to foreign-supplied critical defence equipment can be restricted during geopolitical tensions.
- Option (b) is incorrect; a key feature is its integration with India's indigenous NaVIC (Navigation with Indian Constellation), specifically to avoid reliance on foreign systems like GPS.
- Option (c) is incorrect; the MCPS is noted for a lower rate of descent and superior control, which enhances safety and precision, not speed.
- Option (d) is too general; while it's built for extreme high-altitude conditions (tested at 32,000 ft), its main strategic breakthrough is its indigenous development and high-altitude capability.

### 62. Solution: C

Statement-I is correct. The South Atlantic Anomaly (SAA) is a well-known hazard for low-Earth orbit (LEO) The significantly weakened magnetic field in this region allows the Van Allen radiation belts to dip closer to the Earth's surface. When satellites pass through this area, they are exposed to a

much higher flux of charged solar particles and cosmic rays, which can cause single event upsets (SEUs) in electronics, leading to data corruption, sensor damage, or temporary blackouts. The Hubble Space Telescope, for example, suspends observations when passing through the SAA.

- Statement-II is incorrect. The SAA is characterized by its weak magnetic field intensity, not a higher one. It is precisely this magnetic weak spot that fails to adequately shield the region from highenergy particles. The statement misrepresents the fundamental nature of the anomaly.
- Therefore, Statement-I is correct, but Statement-II is incorrect.

### 63. Solution: D

- The core aim of the State Mining Readiness Index (SMRI) is to act as a performance benchmarking framework. By evaluating and ranking states on key indicators, the Ministry of Mines intends to encourage healthy competition among them. This concept, where states compete to improve governance and attract investment, is a key tenet of cooperative and competitive federalism. The index pushes states to enhance transparency, speed up mine operationalization, and adopt sustainable practices, thereby improving the overall mining ecosystem.
- Option (a) is incorrect; the index promotes statelevel reforms, not nationalization.
- Option (b) is partially true (it was a Budget announcement), but its primary objective is not just to rank wealth, but to rank readiness, performance, and reform (e.g., auction performance, sustainability).
- Option (c) is incorrect; the index is designed as a tool to motivate and support lagging states, not to be purely punitive.

- Statement 1 is incorrect. SITAA is explicitly a collaboration program. It is not an exclusive internal UIDAI program. Its framework is designed to integrate efforts from startups, academia, and industry partners to co-develop solutions, leveraging the external innovation ecosystem.
- Statement 2 is correct. The scheme was launched UIDAI specifically to boost Aadhaar authentication security against new and emerging digital threats. Countering deepfakes, spoofing, and biometric fraud is a primary goal, reflecting a proactive stance against advanced cyber threats.
- Statement 3 is correct. The scheme is structured around three key innovation challenges. One of these challenges is the development of "Contactless Fingerprint Authentication" SDKs (Software Development Kits). This aims to enable secure and convenient fingerprint recognition using common devices like smartphones, enhancing both security and accessibility.

- Statement-I is a correct factual assertion: China has filed a formal complaint at the WTO.
- Statement-II is also correct and provides the precise legal and economic reasoning for the complaint mentioned in Statement-I.
- The core of China's argument is that India's subsidies (under schemes like PM e-Drive and PLI) are discriminatory. By allegedly favouring domestic manufacturers (like Tata Motors and Mahindra Electric) over foreign ones, these policies are claimed to distort fair competition. This alleged discrimination forms the basis of the violation of the WTO's Agreement on Subsidies and Countervailing Measures (SCM), which sets rules for how countries can use subsidies and how they can counter the effects of others' subsidies.
- Therefore, Statement-II correctly identifies the substance and legal basis of the complaint in Statement-I, making it the correct explanation.

### 66. Solution: D

- Statement 1 is incorrect. The first stage is "Consultation," a mandatory 60-day diplomatic phase where the parties must try to find a mutually acceptable solution. Only after these consultations fail can the complaining party request the formation of a dispute settlement panel, which is established by the Dispute Settlement Body (DSB), not the Appellate Body.
- Statement 2 is incorrect. A country cannot unilaterally impose retaliatory Retaliation is the last step of the process. The complaining party must first win the case at the panel (and appeal) stage. If the losing party (India, in this hypothetical) is found to be in violation and then fails to comply with the ruling within a reasonable time, only then can the winning party (China) request authorization from the DSB to impose retaliations.
- Statement 3 is incorrect. The WTO Appellate Body has been non-functional since 2019 because its member appointments have been blocked. This has crippled the WTO's ability to serve as the final arbiter. Some members, including China, use the Multi-Party Interim Appeal Arbitration Arrangement (MPIA) as a workaround, but the original Appellate Body is not functional.

#### 67. Solution: C

- Statement 1 is correct. MERCOSUR (Mercado Común del Sur) is a South American economic bloc formally created on 26 March 1991 by the Treaty of Asunción.
- Statement 2 is correct. A key feature of MERCOSUR is its status as a customs union. This means that in addition to promoting free trade within the bloc, it maintains a Common External Tariff (CET), which is a uniform tariff policy for

- goods imported from non-member countries.
- Statement 3 is correct. The FOCEM (MERCOSUR Structural Convergence Fund), established in 2005, is a vital mechanism designed to address regional inequalities. It funds projects to help smaller economies (like Paraguay and Uruguay) bridge the development gap with larger members (like Brazil and Argentina), thereby promoting social cohesion and reducing economic asymmetries.

#### 68. Solution: B

- The primary and defining distinction between these two types of stablecoins is their stabilisation mechanism.
- Option (b) correctly identifies this core difference. A fully reserved stablecoin maintains its peg because each token is theoretically backed by a corresponding real-world asset (like a US dollar or a government bond) held in a reserve. The value is derived from the holder's claim on that underlying collateral.
- In contrast, an algorithmic stablecoin has no such collateral. It maintains its peg by using a computer program (a smart contract) that automatically increases or decreases the supply of tokens in circulation to match demand, thereby controlling the price.

### 69. Solution: C

- The 'Fare Se Fursat' scheme is fundamentally aligned with the vision and objectives of the UDAN (Ude Desh ka Aam Nagrik) The primary goal of UDAN is to enhance regional air connectivity and make air travel affordable for the masses, particularly in Tier-2 and Tier-3 cities.
- The 'Fare Se Fursat' scheme directly contributes to this by offering predictable and affordable fixed airfares, which removes the uncertainty of dynamic pricing that often acts as a barrier for middle-class and first-time flyers. By making air travel more accessible and stress-free on regional routes, the scheme embodies the UDAN philosophy of "Naye Bharat ki Udaan," positioning aviation as a public service rather than a luxury.

- Statement-I is correct because a key feature of LEAPS 2025 is to promote Environmental, Social, and Governance (ESG) compliance and sustainability goals. This involves encouraging logistics companies to adopt environmentally friendly practices, such as reducing carbon footprint, optimizing fuel usage, and implementing sustainable warehousing solutions, collectively known as green logistics.
- Statement-II is also correct as the initiative fundamentally supports national campaigns like Make in India and Atmanirbhar Bharat. By enhancing the efficiency, innovation, and global competitiveness of India's domestic logistics

- sector, LEAPS 2025 reduces reliance on foreign logistics services and strengthens the indigenous industrial ecosystem.
- However, Statement-II is not the correct explanation for Statement-I.

- Statement 1 is incorrect. The Crew Escape System (CES) developed by ISRO for the Gaganyaan mission is a 'puller type' It is positioned at the forward end of the LVM3 rocket and utilizes a series of high-burn solid motors to rapidly pull the crew module away from the launch vehicle in case of an emergency. This design is similar to the escape systems used in the Russian Soyuz and the American Apollo (Saturn V) missions. The 'pusher type' system, which uses liquid-fuel engines integrated into the capsule to push it away, is notably employed by companies like SpaceX for their Falcon 9 rocket.
- Statement 2 is correct. The activation of the CES is a highly automated and rapid process. The Integrated Vehicle Health Management (IVHM) system continuously monitors the launch vehicle's parameters. If it detects any critical anomaly that could lead to a catastrophic failure, it automatically triggers the CES to initiate the abort sequence, ensuring the crew's safety without manual intervention.
- Statement 3 is correct. The core objective of the CES is astronaut survival during the riskiest phases of flight, such as lift-off and ascent. Upon activation, it pulls the crew module away from the malfunctioning rocket at a high acceleration. Once at a safe distance and altitude, a sequence of multi-stage parachutes is deployed to slow down the module's descent, ensuring a controlled and safe splashdown in the sea.

#### 72. Solution: D

- Statement 1 is correct. The EPF New Withdrawal Rules, 2025, aim to simplify the withdrawal process. A significant reform is the consolidation of 13 different withdrawal purposes into three broad, simplified categories: Essential Needs (covering illness, education, marriage), Housing Needs, and Special Circumstances. This streamlining is designed to reduce complexity and make it easier for subscribers to understand their eligibility and apply for withdrawals without navigating a maze of specific conditions.
- Statement 2 is incorrect. While a new minimum balance rule has been introduced to balance liquidity with long-term savings, it requires members to retain 25% of their EPF corpus, not 50%. The purpose of this rule is to preserve a portion of the savings to benefit from the power of compounding and to ensure that a foundational amount for retirement is protected, even as

- members access funds for immediate needs.
- Statement 3 is correct. To enhance accessibility and provide timely financial support, the reforms have relaxed the service tenure requirements. The minimum service period for making withdrawals for housing-related purposes has been significantly reduced to just 12 months. Similarly, the tenure for withdrawals for marriage or education has been lowered to 7 years, making funds more accessible to members earlier in their careers.

#### 73. Solution: C

- Statement 1 is correct. The UNHRC was created by the UN General Assembly (UNGA) via Resolution 60/251 in 2006. It was formed to replace the UN Commission on Human Rights, which had faced criticism for its politicisation and perceived ineffectiveness. The new council was designed to have a stronger institutional framework for promoting and protecting human rights globally.
- Statement 2 is incorrect. The UNHRC have 47 Member States, they are elected directly by the UN General Assembly, not the UN Security Council. The election is conducted via a secret ballot, and candidates need a majority of votes from the members of the General Assembly to secure a seat.
- Statement 3 is correct. The tenure for a member on the UNHRC is three years. To prevent indefinite dominance by certain states, a member can serve for a maximum of two consecutive terms. After serving two terms, a state must step down and is not immediately eligible for re-election.
- Statement 4 is correct. The Universal Periodic Review (UPR) is a unique and vital process of the UNHRC. Under this mechanism, the human rights performance of every UN Member State is reviewed every four to five years. This process ensures that all countries are held to the same standard and encourages them to improve their human rights situations through a cooperative, state-driven process.

- Statement 1 is incorrect. While Visva-Bharati was established by Rabindranath Tagore in 1921, it did not become a Central University in that year. It operated as an independent institution embodying Tagore's educational ideals. It was only in 1951, through an Act of Parliament, that Visva-Bharati was declared a Central University and an "Institution of National Importance," formalising its status within the Indian higher education system.
- Statement 2 is correct. The core philosophy of Visva-Bharati, as envisioned by Tagore, was to create a place of learning that was holistic, breaking the rigid barriers between disciplines

and integrating arts, humanities, and sciences. A significant and practical dimension of this philosophy was rural reconstruction development. This was manifested through Sriniketan, an institute dedicated to improving rural life through education, crafts, and agricultural innovation, making it a key component of the university's identity.

Statement 3 is incorrect. Visva-Bharati University is not located in Kolkata. It is situated at Santiniketan in the Birbhum district of West Bengal, about 160 kilometres from Kolkata. The location was intentionally chosen by Tagore for its serene, rural environment, which he believed was conducive to learning in harmony with nature, away from the confines of a bustling city.

# 75. Solution: C

- Option (a) is incorrect. Madagascar is separated from the southeastern coast of the African mainland, specifically Mozambique, by the Mozambique Channel. The Strait of Gibraltar is located much farther north, connecting the Atlantic Ocean to the Mediterranean Sea between Spain and Morocco.
- Option (b) is incorrect. The capital city of Madagascar, Antananarivo, is located in the central high plateau region of the island, not on the coastal plains. This highland region is the backbone of the country and hosts its largest urban centres.
- Option (c) is correct. The physical geography of Madagascar can be distinctly divided into three parallel longitudinal zones. Running along the north-south axis, these are: the central high plateau which forms the spine of the island; the narrow eastern coastal plains that face the Indian Ocean; and the broader western low plateaus and plains that descend towards the Mozambique Channel. This tripartite division is a fundamental characteristic of its topography.
- Option (d) is incorrect. The prominent mountain massifs on the island, such as Ankaratra and Andringitra, are of volcanic origin, not fold mountains. They are part of the central highlands and represent significant volcanic formations that have shaped the island's landscape and river systems.

# 76. Solution: B

- Statement 1 is incorrect. The 2026-2028 term marks India's seventh tenure on the UNHRC, not its first. India has been a frequent member of the council since its inception in 2006, serving multiple terms (e.g., 2011-2014, 2014-2017, 2022-2024, etc.). This consistent election reflects India's significant standing and engagement within the global human rights framework.
- Statement 2 is correct. Membership in the UNHRC is distributed based on equitable geographical

representation. The Asia-Pacific group and the African group hold the largest number of seats, with 13 seats each. This ensures significant representation for these populous and diverse regions in the global human rights body.

# 77. Solution: A

- Statement is incorrect. The standard meteorological definition of a blizzard requires visibility to be reduced to below 0.4 kilometers (or a quarter mile) due to blowing snow for a duration of at least three hours. The 5-kilometer threshold is far too high.
- Statement 2 is incorrect. The combination of strong winds and very low temperatures during a blizzard produces a significant wind chill effect. This means the perceived temperature on exposed skin is much lower than the actual air temperature, greatly increasing the risk of frostbite and hypothermia. Heavy snow does not provide insulation against this effect.
- Statement 3 is correct. An uplift mechanism is essential for a blizzard's development as it forces moist air to rise and form snow. Orographic uplift, where air is forced upward as it passes over mountain ranges, is one such mechanism. Another common one is frontal uplift, where warm air is forced to rise over a colder air mass.

#### 78. Solution: A

- Statement I makes an assertion, and both Statements II and III provide distinct, valid reasons that collectively explain why this assertion is true.
- Statement I is a well-known fact about the Snow
- Statement II is correct and provides the first part of the explanation. The cat's unique pelage is a perfect physical adaptation for blending into its high-altitude habitat, making it visually elusive. This camouflage is a primary reason for its "ghostlike" reputation.
- Statement III is also correct and provides the second part of the explanation. The animal's behavioral traits—being solitary, often active at dawn and dusk (crepuscular) or night, and its naturally shy nature—combined with its extremely low density across vast territories, contribute significantly to its elusiveness.
- Since both the physical camouflage (Statement II) and the secretive behavior (Statement III) are key reasons why the Snow Leopard is so difficult to spot and is called the "ghost of the mountains," both statements are correct and both explain Statement I.

# 79. Solution: B

Statement 1 is correct. A key factor limiting the intensity of cyclones in the Arabian Sea is the presence of dry air intrusion. Prevailing winds often bring dry, subsiding air from the nearby arid regions of the Arabian Peninsula, which disrupts the moist, convective environment necessary for a cyclone to strengthen.

- Statement 2 is incorrect. The Bay of Bengal is significantly warmer than the Arabian Sea on average. Its semi-enclosed nature allows it to retain heat, providing more of the thermal energy that fuels cyclones, which is a reason why it experiences more intense storms.
- Statement 3 is incorrect. The Coriolis force is zero at the equator and increases with latitude towards the poles. This force is essential to impart the spinning motion to a developing cyclone. Because it is weakest near the equator, tropical cyclones cannot form within about 5 degrees of latitude of the equator.

#### 80. Solution: A

- Pair 1 is incorrectly matched. The Model Youth Gram Sabha (MYGS) is a flagship initiative of the Ministry of Panchayati Raj. While it is implemented in collaboration with the Ministry of Education and the Ministry of Tribal Affairs, the nodal agency is the Panchayati Raj Ministry.
- Pair 2 is incorrectly matched. The PM Dhan Dhaanya Krishi Yojana (PMDDKY) is a comprehensive agricultural scheme implemented through the convergence of schemes from 11 Union Ministries, with the Ministry of Agriculture and Farmers' Welfare playing a central role. NITI Aayog's role is to guide and review the district plans, drawing inspiration from its Aspirational Districts Programme, but it is not the nodal implementing agency.
- Pair 3 is correctly matched. The National Camel Sustainability Initiative (NCSI) is being planned and launched by the Ministry of Fisheries, Animal Husbandry and Dairying. The Department of Animal Husbandry and Dairying (DAHD) within this ministry is the nodal body for this mission.

#### 81. Solution: A

Statement 3 is incorrect.

Rashtriya Vayoshree Yojana is a central sector scheme designed to provide assistive devices such as walking sticks, wheelchairs, hearing aids, and spectacles to elderly individuals below the poverty line (BPL). The goal is to improve their physical mobility and ensure they can perform daily activities with ease. The scheme is entirely funded by the Senior Citizens' Welfare Fund and is non-contributory, meaning the beneficiaries do not need to contribute any amount to avail the benefits. This scheme is crucial in aiding elderly individuals with age-related disabilities, ensuring they maintain a degree of independence despite their physical limitations.

# 82. Solution: A

Statement 1 is correct because the Satavahana dynasty

contributed the toranas (gateways) to the Great Stupa. Statement 2 is incorrect as the Satavahanas did not construct new stupas at Sanchi; they enhanced the existing stupa by adding the gateways.

Statement 3 is incorrect because the carvings on the toranas depict scenes from the Jataka Tales and Buddhist iconography, not royal conquests or battles.

### 83. Solution: C

Emperor Rajendra I of the Chola dynasty utilized the Andaman Islands as a strategic base for launching naval expeditions against the Srivijaya Empire in present-day Indonesia. This historical connection was a factor in the renaming of Port Blair to Sri Vijaya Puram.

# 84. Solution: B

- The National Quantum Mission (NQM), approved by the Government of India in 2023, aims to bolster India's capabilities in quantum technologies, covering areas like quantum computing, quantum communication, and quantum sensing.
- Statement 1 is correct The mission specifically includes the development of secure communication systems using Quantum Key Distribution (QKD) over both terrestrial and satellite platforms. This aligns with global efforts to enhance cybersecurity using quantum mechanics.
- Statement 2 is also correct The mission is being implemented under the Department of Science and Technology (DST), with collaborative involvement from major scientific agencies like ISRO, DRDO, and MeitY, ensuring an integrated national approach.
- Statement 3 is incorrect While ambitious, the mission's declared goal is to place India among the top six leading nations in quantum technologies, not necessarily the global leader.

# 85. Solution: C

Rapeseed and Mustard are listed under Rabi crops, not Kharif crops. The Kharif crop list includes crops such as paddy, cotton, and groundnuts, for which the MSP is announced by the government.

# 86. Solution: B

Under the Price Support Scheme (PSS), central nodal agencies such as NAFED and FCI procure pulses, oilseeds, and copra, and the government bears the procurement costs and any losses incurred.

PM-AASHA is designed to ensure MSP assurance for farmers, helping to stabilize prices and support their income.

Statement 2 is incorrect because the PDPS does not involve physical procurement; it only compensates the price difference between the mandi prices and MSP for oilseeds.

Statement 3 is also incorrect as the PPPS is focused on oilseeds, not rice and wheat.

#### **About PM AASHA:**

| Scheme Component                             | Description   |
|--|---|
| Objective                                    | Ensure remunerative prices for farmers through Minimum Support Price (MSP) assurance. Announced in 2018 budget.   |
| Aim  | Strengthen the procurement mechanism to improve farmers' income.  |
| Components                                   | 1. Price Support Scheme (PSS) 2. Price Deficiency Payment Scheme (PDPS) 3. Private Procurement & Stockist Scheme (PPPS)   |
| Price Support Scheme (PSS)                   | Central nodal agencies (NAFED, FCI) will procure pulses, oilseeds, and copra. 25% of marketable surplus will be procured. Government covers procurement costs and losses. |
| Price Deficiency Payment<br>Scheme (PDPS)    | State pays the difference between mandi prices and MSP for oilseeds. No physical procurement involved. Modeled on schemes from Madhya Pradesh and Haryana.                |
| Private Procurement & Stockist Scheme (PPPS) | Piloted in select districts. Private agencies procure oilseeds at MSP in coor- dination with the gov- ernment when prices fall below MSP.                                 |

### 87. Solution: C

- Statement 1 is incorrect The Election Commission cannot arbitrarily remove names from electoral rolls; it must follow due process, including verification and public notice.
- Statement 2 is incorrect A person cannot be registered in multiple constituencies, as voter registration is based on residence, not property ownership.
- Statement 3 is incorrect There is no automatic disqualification for non-voting in India. Unlike Australia or Belgium, voting is not mandatory.

### 88. Solution: d)

- Statement-I is incorrect DAC was not created to manage personnel or human resources; it deals with capital acquisitions like weapons, aircraft, and systems.
- Statement-II is correct One of DAC's primary roles is to approve Acquisition Proposals and align them with the Long-Term Integrated Perspective

Plan (LTPP). It provides strategic direction to India's procurement process and ensures efficiency, transparency, and policy consistency.

# 89. Solution: D

Civil contempt occurs when a person or entity willfully disobeys a court order or breaches a legal obligation, such as failing to comply with a court judgment.

Criminal contempt, on the other hand, involves actions that obstruct or undermine the authority, dignity, or functioning of the court, such as showing disrespect in court or disrupting judicial proceedings.

#### 90. Solution: C

Jordan has a coastline along the Gulf of Agaba, which is part of the Red Sea. This narrow strip of coastline is Jordan's only access to the sea, and the city of Aqaba is a key port and a hub for tourism and trade. Jordan does not have a coastline on the Mediterranean Sea or Persian Gulf.

### 91. Solution: A

- Statement 1 is incorrect. The proposal explicitly states that the ISF will operate outside a United Nations mandate. It is conceived as a multinational force but under a framework led by the United States, representing a non-UN model for stabilization.
- Statement 2 is incorrect. While the plan involves Arab and international partners, the ultimate control and oversight of the ISF will be with the United States, under the supervision of a "Board of Peace" chaired by the U.S. President. It is not managed by a coalition of Arab nations.
- Statement 3 is correct. One of the principal aims of the ISF is to create a secure environment that allows for the phased withdrawal of the Israeli Defense Forces (IDF). The ISF would assume responsibility for law and order and security in areas vacated by the IDF, thereby preventing a power vacuum and the re-emergence of armed groups. This function is central to the de-escalation and transition process outlined in the plan.

- The primary objective of the "Trade Watch Quarterly" report is to serve as an analytical tool. It provides a detailed, evidence-based assessment of India's trade performance, covering merchandise and services, on a quarterly basis. The report analyzes trends, identifies sectoral challenges, and examines export competitiveness. This information is intended to guide policy interventions by the government to strengthen manufacturing, boost exports, and improve India's integration into global value chains. It is a diagnostic and advisory publication, not a regulatory or executive one.
- Option (a) is incorrect as target-setting is a function of executive ministries.
- Option (b) is incorrect as regulating foreign exchange is the domain of the Reserve Bank of India.

• Option (c) is incorrect as trade negotiations are conducted by the Ministry of Commerce.

### 93. Solution: D

- Project Sloth Bear: This is the first-ever national conservation framework for sloth bears, addressing threats like habitat loss and poaching. This matches with description 3.
- Project Gharial: This project aims to strengthen the recovery of the critically endangered gharial, a reptile found in river ecosystems like the Chambal and Gandak. This matches with description 4.
- Project Dolphin (Phase II): This initiative focuses on the conservation of river and marine cetaceans, which includes aquatic mammals like the Ganga River Dolphin. This matches with description 1.
- TOTR Project: The Tigers Outside Tiger Reserves project is specifically designed to manage tigers that move into human-dominated landscapes, aiming to reduce human-tiger conflict. This matches with description 2.

# 94. Solution: C

- The most significant strategic concern for India stems from Pasni's geographical location. The port is situated very close to the India-backed Chabahar Port in Iran ( $\approx 300$  km). The development of Pasni with US involvement could introduce a new strategic player in India's immediate maritime vicinity. This could potentially affect the operational dynamics of Chabahar, which is crucial for India's connectivity to Afghanistan and Central Asia.
- Furthermore, a new, technologically advanced port so close to India's western seaboard could have implications for maritime surveillance, logistics, and intelligence gathering in the Arabian Sea.

# 95. Solution: B

• The core significance of the FOXP3 gene discovery lies in its role as a master regulator or "switch". Research on "scurfy" mice demonstrated that a single faulty FOXP3 gene was responsible for their severe autoimmune diseases. This established that FOXP3 is the critical factor that instructs a conventional T cell to become a regulatory T cell (Treg). Without a functional FOXP3 gene, Tregs cannot be formed, leading to a breakdown of peripheral immune tolerance (the body's ability to tolerate its own tissues).

# 96. Solution: A

- Statement 1 is incorrect. The "Trade Watch Quarterly" is a flagship analytical publication solely from NITI Aayog. While it analyzes trade data, it is not a collaborative effort with the Reserve Bank of India, which has its own publications and mandate related to foreign exchange management.
- Statement 2 is incorrect. While imports from China did surge, the report specifies that this was due to

- higher demand for electronics and machinery, not agricultural products and textiles.
- Statement 3 is correct. The report explicitly states that services exports reached a record \$387.5 billion. This highlights a strong performance and robust growth in the services sector, which is a major contributor to India's overall trade. Key drivers included IT, aviation, and financial services.

### 97. Solution: B

- The primary role of the Centre of Excellence for Human-Wildlife Conflict Management is to function as a specialized research and policy hub. Its mandate is to focus on developing scientific and data-driven solutions to mitigate conflict.
- This includes creating AI-based conflict prediction models, designing effective field-based mitigation tools, and providing capacity-building for forest officials and communities. It is an institution focused on research, strategy, and policy development rather than direct management activities like animal relocation (c), sample storage (a), or veterinary certification (d).
- Its purpose is to provide the knowledge and tools needed by on-ground managers to better handle human-wildlife interactions.

#### 98. Solution: C

- Statement I is correct. The Kokrajhar-Gelephu Special Railway Project (SRP) is a historic initiative that aims to provide Bhutan with its first-ever railway connectivity. This cross-border project will connect Kokrajhar in Assam, India, with Gelephu in Bhutan.
- Statement II is correct and it explains Statement I. The project is being implemented by the Northeast Frontier Railway (NFR) and is supported by the Government of India. It is a key component of India's 'Act East Policy', which aims to enhance connectivity and integration with its eastern neighbors. The implementation by an Indian railway zone and its alignment with a major foreign policy initiative explain how the project is being realized.
- Statement III is incorrect. The project is supported by the Government of India and is being implemented by an Indian agency. The estimated cost of approximately ₹3,500 crore is being borne by India, not solely by Bhutan. This project is a reflection of the strong bilateral ties between the two countries.

- The Cold Desert Biosphere Reserve is a significant high-altitude ecosystem in India.
- Statement 1 is incorrect as the reserve is located in the Lahaul-Spiti district of Himachal Pradesh, not Ladakh. It lies within the Trans-Himalayan region, which is characterized by its arid conditions and extreme temperatures.

- Statement 2 is correct; with its inclusion in UNESCO's World Network of Biosphere Reserves (WNBR) in 2025, it became India's first high-altitude cold desert site to receive this global recognition, highlighting its unique biodiversity and cultural heritage.
- Statement 3 is also correct. The biosphere reserve is an amalgamation of several protected areas, including the Pin Valley National Park, Kibber Wildlife Sanctuary, and the Chandratal Wetland, creating a large, contiguous conservation landscape. This integrated approach helps in balancing biodiversity conservation with the traditional livelihoods of the local communities, such as pastoralism and the practice of Sowa Rigpa medicine.

- India has been actively expanding its network of wetlands of international importance.
- Statement I is correct as Gokul Jalashay in Buxar and Udaipur Jheel in West Champaran have

- been designated as Ramsar sites. These sites are crucial for their ecological roles, including flood mitigation and providing habitat for numerous bird species.
- Statement II is also correct; both these newly designated wetlands are located in Bihar, adding to the state's recognized ecologically significant areas.
- However, Statement III is incorrect. While these additions increase Bihar's tally of Ramsar sites to five, it does not have the highest number in India. As of 2025, India has 93 Ramsar sites, with the United Kingdom (176) and Mexico (144) having more globally. As of 2025, Tamil Nadu has the highest number of Ramsar sites in India, with 16 wetlands designated under the Ramsar Convention on Wetlands. The increase in Ramsar sites reflects a growing commitment to the conservation and wise use of wetlands, which are vital for biodiversity and human well-being.

