



Prelims Analysis 2025 (Set B)

UPSC CSE Prelims 2025 GS Paper 1 Analysis: Difficulty Level and Cutoff Insights

Based on a detailed analysis of the UPSC CSE Prelims 2025 GS Paper 1 and trends from previous years' UPSC CSE Prelims papers, the difficulty level of GS Paper 1 was moderate to challenging. The paper rigorously tested candidates' conceptual clarity and analytical skills across Polity, History, Geography, Economy, Environment, Science and Technology, and Current Affairs. Notably, application-based questions were prominent in Science and Technology and Economy, requiring candidates to apply knowledge to real-world scenarios, such as technological innovations or economic policies. This aligns with UPSC's shift toward analytical questions, evident in recent papers, while maintaining a balanced subject distribution.

The cut-off for UPSC CSE Prelims 2025 is expected to vary by category, shaped by the paper's difficulty level, candidate participation, and vacancy numbers. Historical cut-offs provide context: the General category cut-off was 88.22 marks out of 200 in 2022, 75.41 marks in 2023 and 87.98 marks in 2024, driven by paper complexity and competition. The predicted cutoff for 2025 is likely to follow these trends, favoring candidates who excelled in application-based questions in Science and Technology and Economy alongside static topics. As aspirants await results, preparation for the UPSC CSE Mains 2025 becomes critical, with a focus on structured answer writing to succeed in the next stage.

Drishti IAS

UPSC Mains Test Series - 2025

Package - II and III

English and Hindi Medium | Online and Offline Mode

Package - II (12 FLT's)

Starting from | **1st June, 2025**

Package - III (8 FLT's)

Starting from | **29th June, 2025**

Q1. Consider the following types of vehicles:

1. Full battery electric vehicles
2. Hydrogen fuel cell vehicles
3. Fuel cell-electric hybrid vehicles

How many of the above are considered as alternative powertrain vehicles?

- (a) Only one
- (b) Only two

(c) All the three

(d) None

Ans: (c)

Explanation:

- Alternative powertrains include propulsion systems that are **not based exclusively on the internal combustion engine**. This may include hybrids, full battery electrics, hydrogen fuel cells, compressed air, and many other types.
- **Types of EVs:**
 - **Battery Electric Vehicle (BEV):** Fully powered by electricity. These are more efficient compared to hybrid and plug-in hybrids.
 - **Hybrid Electric Vehicle:**
 - **Hybrid Electric Vehicle (HEV):** The vehicle uses both the internal combustion (usually petrol) engine and the battery-powered motor powertrain.
 - These vehicles are not as efficient as fully electric or plug-in hybrid vehicles.
 - **Plug-in Hybrid Electric Vehicle (PHEV):** Uses both an internal combustion engine and a battery charged from an external socket (they have a plug).
 - PHEVs are more efficient than HEVs but less efficient than BEVs.
 - **Fuel Cell Electric Vehicle (FCEV):** Electric energy is produced from chemical energy. For example, a hydrogen FCEV.
 - FCEVs **run on hydrogen fuel cells**, which produce electricity and water as the only by-products offering a clean and efficient alternative to BEVs.

Hence, option (c) is correct.

Sources:

- [TYPES OF ELECTRIC VEHICLES](#)
- [Alternative powertrains - ACEA - European Automobile Manufacturers' Association](#)
- [Drishti IAS source: Hybrid Vehicles as Alternative to EVs](#)
 - [India's Electric Vehicle Journey](#)

Q2. With reference to Unmanned Aerial Vehicles (UAVs), consider the following statements :

1. All types of UAVs can do vertical landing.
2. All types of UAVs can do automated hovering.
3. All types of UAVs can use battery only as a source of power supply.

How many of the statements given above are correct?

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

Ans: (d)

Explanation:

UAVs are aircraft that are **guided autonomously, by remote control**, or by both means and that carry

some combination of sensors, electronic receivers and transmitters, and offensive ordnance.

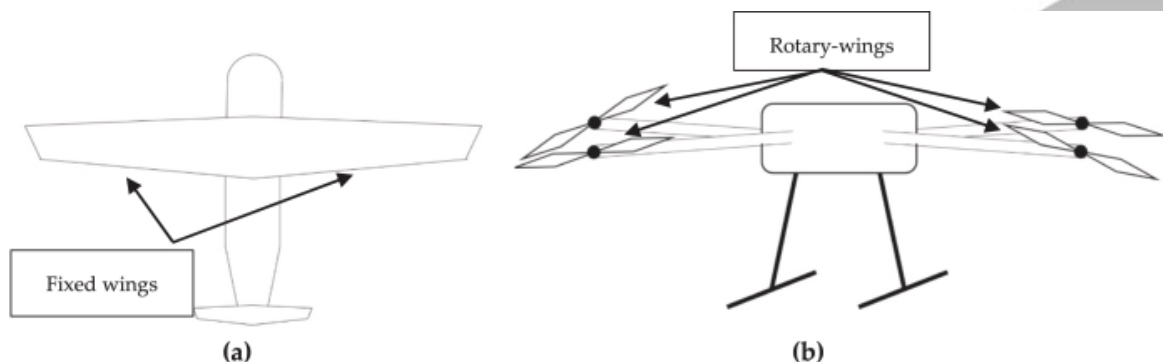
Types of UAVs:

- **Rotary-wing Types**

- The rotor-craft types tend to be more popular since they **can take-off and land vertically**, thus not requiring a launcher or runway, they can hover and are very agile, making them best suited for more precision maneuverability applications. **Hence, statements 1 and 2 are not correct.**

- **Fixed-wing Types**

- Have the advantage of a much simpler structure compared to rotary types. The **fixed wings also give the craft a natural gliding ability**, decreasing power consumption, while the aircraft itself can carry larger loads for longer distances using less power, once again decreasing costs and increasing efficiency.
- The disadvantages of this type include the necessity of a runway or launching device for takeoff and landing, they need to be in a constant forward motion and can thus **not hover as a rotary type** can and they tend to be much larger and bulkier in comparison.



Power Sources:

- There are many **different power sources for drones**, each with its own advantages and disadvantages, some more than others, depending on the application. Presently, the most popular power sources are combustion engines, FCs and batteries. **Hence, statement 3 is not correct.**

Hence, option (d) is correct.

Sources:

- [Unmanned aerial vehicles \(UAVs\) - Military aircraft](#)
- [A comprehensive review of energy sources for unmanned aerial vehicles, their shortfalls and opportunities for improvements](#)

Q3. In the context of electric vehicle batteries, consider the following elements:

- I. Cobalt
- II. Graphite
- III. Lithium
- IV. Nickel

How many of the above usually make up battery cathodes?

- (a) Only one

- (b) Only two
- (c) Only three
- (d) All the four

Answer: (c)

Explanation:

- An electric battery consists of one or more electrochemical cells, which **comprise two electrodes - an anode and a cathode** - and an electrolyte.
 - When a battery is used to supply electric power, the anode provides electrons, which will, when connected by a circuit to an external device, flow and deliver energy.
- There are two classifications of batteries.
 - **Primary batteries are disposable, for single use; secondary batteries can be recharged and reused.**
 - Secondary batteries come in a number of varieties, such as the lead-acid battery found in automobiles, NiCd (Nickel Cadmium), NiMH (Nickel Metal Hydride) and Li-ion (Lithium ion). **Nickel is an essential component for the cathodes of many secondary battery designs**, including Li-ion, as seen in the table below.

BATTERY TYPE	USAGE TYPE	CATHODE	ANODE	ELECTROLYTE
Alkaline	Single Use	Manganese dioxide (MnO ₂)	Zinc	Aqueous alkaline
Lead acid (secondary)	Rechargeable	Lead dioxide (PbO ₂)	Lead	Sulphuric acid
Nickel Cadmium (NiCd) (secondary)	Rechargeable	Nickel oxyhydroxide (NiOOH)	Cadmium	Potassium hydroxide
Nickel Metal Hydride (NiMH) (secondary)	Rechargeable		Hydrogen-absorbing alloy	
Lithium Ion (LCO) (secondary)	Rechargeable	Lithium cobalt oxide (LiCoO ₂)	Carbon-based, typically graphite	Lithium salt in an organic solvent
Lithium Ion (NMC) (secondary)	Rechargeable	Lithium nickel manganese cobalt oxide (LiNiMnCoO ₂)		
Lithium Ion (NCA) (secondary)	Rechargeable	Lithium nickel cobalt aluminium (LiNiCoAlO ₂)		

Hence, option (c) is correct.

Sources:

- [Nickel in batteries](#)
- [Batteries for Electric Vehicles](#)
- [Electric Vehicle Batteries: under the hood](#)

Q4. Consider the following:

- I. Cigarette butts
- II. Eyeglass lenses
- III. Car tyres

How many of them contain plastic?

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

Answer: (c)

Explanation:

- **Cigarette Butts:** They are made of **cellulose acetate, a man-made plastic material**, and contain hundreds of toxic chemicals. While cigarette filters, or the plastic part of butts, can take up to 10 years to completely degrade, the chemicals they release can remain in the environment for many more years beyond the life of the cigarette butt itself.
- **Eyeglass Lenses:** The process of polishing eyeglass lenses generates a substantial amount of microplastics, which are released into wastewater. This indicates that the **lenses themselves are made of plastic materials**.
- **Car Tyres:** Tire wear is estimated to be one of the **largest sources of microplastics** entering the aquatic environment.

Hence, option (c) is correct.

Sources:

- [Tiny But Deadly: Your Butt on Plastic - Earth Day](#)
- [Eye-glass polishing wastewater as significant microplastic source: Microplastic identification and quantification - ScienceDirect](#)
- [Environmental risks of car tire microplastic particles and other road runoff pollutants](#)

Q5. Consider the following substances:

- I. Ethanol
- II. Nitroglycerine
- III. Urea

Coal gasification technology can be used in the production of how many of them?

- (a) Only one
- (b) Only two

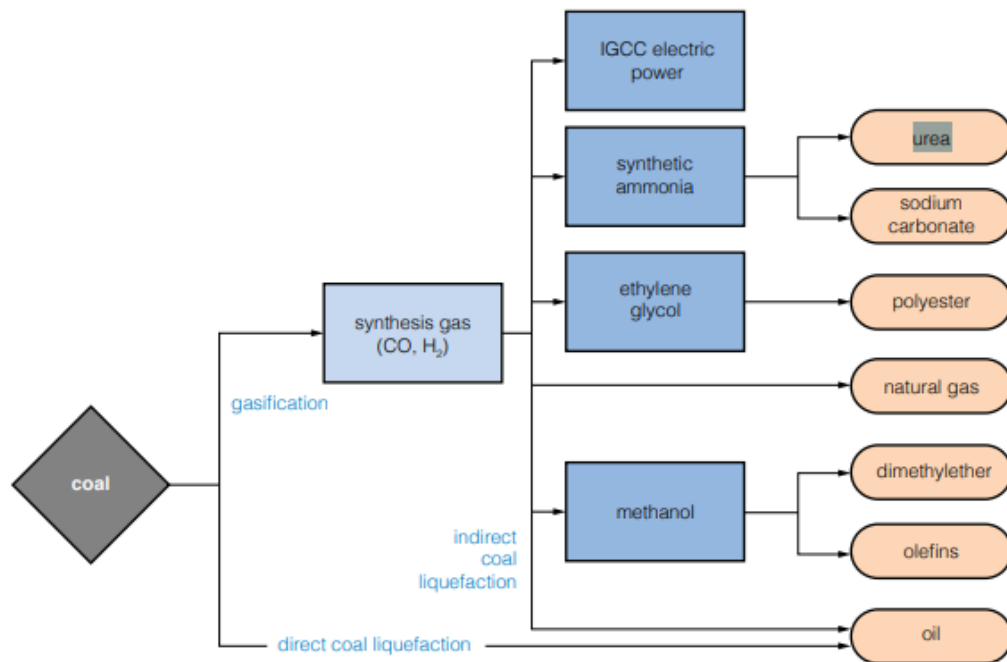
(c) All the three

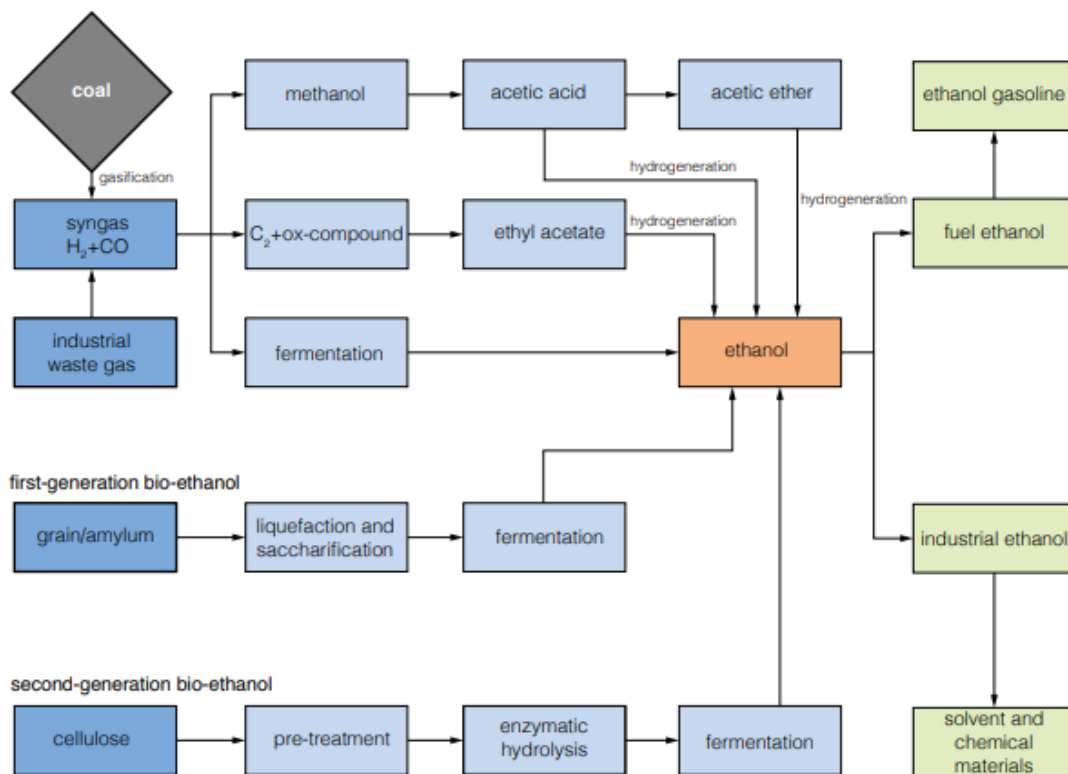
(d) None

Answer: (b)

Explanation:

- Coal gasification is a process that transforms Coal into a **Synthetic gas (Syngas)**, consisting of mixture of gasses such as Carbon monoxide (CO), Hydrogen (H₂), Carbon dioxide (CO₂), Methane (CH₄) and Water vapor (H₂O).
 - Syn Gas produced from Coal gasification can be used in producing Synthetic Natural Gas (SNG), energy fuel (methanol & **ethanol**), **ammonia** for fertilizers and petro-chemicals.





Hence, option (b) is correct.

Sources:

- [Challenges and opportunities for coal gasification in developing countries](#)
- [National Coal Gasification Mission](#)
- Drishti IAS source: [Coal Gasification](#)

Q6. What is the common characteristic of the chemical substances generally known as CL-20, HMX and LLM-105, which are sometimes talked about in media?

- (a) These are alternatives to hydrofluorocarbon refrigerants
- (b) These are explosives in military weapons
- (c) These are high-energy fuels for cruise missiles
- (d) These are fuels for rocket propulsion

Answer: (b)

Explanation:

- CL-20, HMX, and LLM-105 are all **high-energy explosive compounds** developed for military applications, particularly in warheads, bombs, and advanced munitions.

Hence, option (b) is correct.

Sources:

- [The cocrystal mechanism of HMX and LLM-105 by theoretical simulations - ScienceDirect](#)

Q7. Consider the following statements:

- I. It is expected that Majorana 1 chip will enable quantum computing.
- II. Majorana 1 chip has been introduced by Amazon Web Services (AWS).
- III. Deep learning is a subset of machine learning.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (c)

Explanation:

- **Majorana 1 Chip:**
 - **Microsoft** introduced Majorana 1, the **world's first quantum chip powered by a Topological Core architecture**, which aims to revolutionize quantum computing. **Hence, statement 1 is correct, but statement 2 is not correct.**
 - It is made of a material **made from indium arsenide** and aluminum to create what the tech giant calls, the **“world’s first topoconductor,”** a new type of material that can observe band control the Majorana particles.
- **Machine Learning (ML):**
 - **Deep learning is a subset of ML** that uses complex neural networks to replicate human intelligence. **Hence, statement 3 is correct.**
 - ML is a type of artificial intelligence that allows machines to learn from data without being explicitly programmed.

Hence, option (c) is correct.

Sources:

- [What makes Microsoft’s new quantum computing chip 'Majorana 1' different?](#)
- [AI vs. Machine Learning vs. Deep Learning vs. Neural Networks | IBM](#)
- [AI vs. machine learning vs. deep learning: Key differences | TechTarget](#)
- Drishti IAS source: [Majorana 1](#)

Q8. With reference to monoclonal antibodies, often mentioned in news, consider the following statements:

- I. They are man-made proteins.
- II. They stimulate immunological function due to their ability to bind to specific antigens.
- III. They are used in treating viral infections like that of Nipah virus.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only

(d) I, II and III

Answer: (d)

Explanation:

- Monoclonal antibodies are **laboratory-made proteins (man-made protein)** that mimic the immune system's ability to fight off harmful invaders. **Hence, statement 1 is correct.**
- Their immunological activities are based on binding to a **specific ligand or antigen** and may also depend on other effector functions. **Hence, statement 2 is correct.**
 - Encompassing a wide range of clinical indications, mAbs represent a large class of therapeutic biological products that continue to transform modern medicine.
- Monoclonal antibodies have been explored as a treatment option for viral infections, including the **Nipah virus**. For instance, the monoclonal antibody m102.4 has shown promise in neutralizing the Nipah virus. **Hence, statement 3 is correct.**

Hence, option (d) is correct.

Sources:

- [Monoclonal Antibody - an overview | ScienceDirect Topics](#)
- [Monoclonal Antibodies \(mABs\)](#)
- [A monoclonal antibody targeting the Nipah virus fusion glycoprotein apex imparts protection from disease - PMC](#)
- [Therapeutics for Nipah virus disease: a systematic review to support prioritisation of drug candidates for clinical trials - ScienceDirect](#)
- **Drishti IAS source:** [Monoclonal Antibodies for Covid-19](#)

Q9. Consider the following statements:

- I. No virus can survive in ocean water.
- II. No virus can infect bacteria.
- III. No virus can change the cellular transcriptional activity in host cells.

How many of the statements given above are correct?

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

Answer: (d)

Explanation:

- A number of studies have investigated the **ability of viruses to survive in marine systems** and be transported from their sources to marine beaches or shellfish waters. **Hence, statement 1 is not correct.**
- Viruses **can infect a variety of living organisms, including bacteria** (Bacteriophage), plants, and animals. **Hence, statement 2 is not correct**
- Viruses **may also change cellular transcriptional activity, and protein-protein interactions**, promoting efficient production of progeny virus. **Hence, statement 3 is not correct.**
 - For some viruses, specific cellular biochemical functions may be stimulated in order to

enhance virus replication.

Hence, option (d) is correct.

Sources:

- [Pathogenic Human Viruses in Coastal Waters - PMC](#)
- [virus | Learn Science at Scitable](#)
- [Effects on Cells - Medical Microbiology - NCBI Bookshelf](#)

Q10. Consider the following statements:

Statement I: Activated carbon is a good and an attractive tool to remove pollutants from effluent streams and to remediate contaminants from various industries.

Statement II: Activated carbon exhibits a large surface area and a strong potential for adsorbing heavy metals.

Statement III: Activated carbon can be easily synthesized from environmental wastes with high carbon content.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (a)

Explanation:

- Activated carbon consists of a wide range of carbonized materials that are characterized by high porosity and large surface area.
 - Because of its outstanding properties, activated carbon is **utilized in several applications** such as the purification of drinking water, wastewater treatment, and separation of gases and pollutants. **Hence, statement I is correct.**
- Activated carbon has **good potential for adsorbing heavy metals** because of its greater surface area, microporous ability, and chemical complexity of its external area. **Hence, statement II is correct.**
- Activated carbon is **produced from environmental wastes** with high carbon content. **Hence, statement III is correct.**

According to Statement I, activated carbon is a good and attractive tool for removing pollutants from industrial effluents.

- **Statement II explains why it is effective:** Activated carbon has a large surface area and adsorbs heavy metals well, making it ideal for pollution control.
- **Statement III explains why it is attractive:** It can be easily made from waste materials, making it cost-effective and sustainable for industries.
- Together, **both statements justify Statement I** — one by highlighting performance, the other by highlighting accessibility and affordability.

Hence, option (a) is correct.

Sources:

- [Activated Carbon - an overview | ScienceDirect Topics](#)
- Drishti IAS source: [Forever Chemicals](#)



IAS Mains Course

GS Paper 1 to 4

Live Online | English Medium

 150+ Classes of 300+ Hours

 PYQs Solved Papers

 Free QIP Classes Available

 Free Access of 12 Mock Tests

Admissions Open

Q11. Consider the following statements

Statement I : Studies indicate that carbon dioxide emissions from cement industry account for more than 5% of global carbon emissions.

Statement II : Silica-bearing clay is mixed with limestone while manufacturing cement.

Statement III : Limestone is converted into lime during clinker production for cement manufacturing.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and Statement III is correct and that explain statement I
- (d) Neither Statement II nor Statement III is correct

Ans: (a)

Explanation:

- As per the **World Economic Forum**, the cement industry is responsible for approximately **8% of global CO₂ emissions**. The two major sources of these emissions are the **calcination of limestone** and the **combustion of fossil fuels** during cement production. **Hence, statement I is correct.**
- In the production of cement, raw materials like **limestone (a source of calcium carbonate)** and **clay or shale (rich in silica, alumina, and iron)** are ground and mixed.
 - These materials are then heated in kilns to produce **clinker**, the key intermediate product in cement. **Hence, statement II is correct.**
- **Carbon dioxide (CO₂)** is a byproduct of a chemical conversion process used in the production of clinker, a component of cement, in which **limestone (CaCO₃)** is converted to lime (CaO). **CaCO₃ → CaO + CO₂**. **Hence, statement III is correct.**
 - This chemical reaction is a major contributor to direct CO₂ emissions from the cement sector and is unavoidable in the current production process.
- **CO₂ emissions in the cement industry occur primarily in the production process of clinker**, an intermediate product for cement, where **CO₂** is released through both the **combustion of fuels for heating** and the **decomposition of limestone** as a chemical process.

Therefore, **all the three statements are correct, and Statements II and III help explain** why the

cement industry is a significant source of CO₂ emissions.

Hence, option (a) is correct.

Sources:

- [Cement is a big problem for the environment. Here's how to make it more sustainable](#)
- [Portland Cement - an overview | ScienceDirect Topics](#)
- [CO₂ EMISSIONS FROM CEMENT PRODUCTION](#)
- [Projecting future carbon emissions from cement production in developing countries | Nature Communications](#)

Q12. Consider the following statements :

Statement I: At the 28th United Nations Climate Change Conference (COP28), India refrained from signing the 'Declaration on Climate and Health'.

Statement II: The COP28 Declaration on Climate and Health is a binding declaration; and if signed, it becomes mandatory to decarbonize the health sector.

Statement III: If India's health sector is decarbonized, the resilience of its health-care system may be compromised.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Ans: (c)

Explanation:

- At the **28th United Nations Climate Change Conference (COP28)** held in **Dubai in 2023**, India chose **not to sign** the **COP28 UAE Declaration on Climate and Health**.
 - The declaration was endorsed by over 140 countries and aimed to highlight the link between climate change and public health, urging nations to build climate-resilient and low-carbon health systems. **Hence, statement I is correct.**
- The **Declaration on Climate and Health** at COP28 is a **non-binding declaration**. It does **not impose legal obligations** or make it **mandatory to decarbonize the health sector** for countries that sign it. **Hence, statement II is incorrect.**
 - Rather, it encourages voluntary action by governments to improve the sustainability and resilience of their healthcare systems in the face of climate change.
- India has cited practical limitations in the **short-term feasibility of reducing greenhouse gas emissions** from cooling applications in the health sector as the primary reason for not signing the COP28 Declaration on Climate and Health.
 - India expressed concern **that an immediate push for decarbonization, particularly in essential services like cooling in hospitals and health facilities, may compromise** the resilience and functionality of its healthcare system, especially in remote and underserved areas where reliable cooling is vital. **Hence, statement III is correct.**

Hence, option (c) is correct.

Sources:

- [India refuses to sign COP28 Declaration on Climate and Health. Here's why | Today News](#)
- [COP28 Declaration on Climate and Health](#)

Q13. Consider the following statements:

Statement I: Scientific studies suggest that a shift is taking place in the Earth's rotation and axis.

Statement II: Solar flares and associated coronal mass ejections bombarded the Earth's outermost atmosphere with tremendous amount of energy.

Statement III : As the Earth's polar ice melts, the water tends to move towards the equator.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Ans: (b)

Explanation:

- Scientific studies, including those conducted by **NASA's Jet Propulsion Laboratory**, confirm that a **shift is occurring in Earth's axis of rotation**, a phenomenon known as "**polar wander**" or "**true polar drift**".
 - Over the past century, the position of the Earth's rotational pole has changed by several meters, and this movement has **accelerated** in recent decades. **Hence, statement I is correct.**
 - The primary driver of this shift is **mass redistribution** on the Earth's surface, particularly due to **climate-induced ice melt and groundwater depletion**.
- It is true that **solar flares and coronal mass ejections (CMEs)** bombard Earth's upper atmosphere with large amounts of energy, impacting **communication systems, GPS accuracy, and power grids** by disturbing the **magnetosphere**. **Hence, statement II is correct.**
 - However, these **electromagnetic disturbances do not affect Earth's physical rotation or axial position**, and **hence do not explain** the axial shift mentioned in Statement I.
- When **polar ice melts**, particularly in Greenland and Antarctica, the resulting water redistributes itself across the planet, largely moving toward the **equator** due to gravitational balancing and Earth's rotation.
 - This redistribution of mass alters the **moment of inertia** of the planet, causing a **wobble or drift** in Earth's rotational axis. **Hence, statement III is correct.**

Therefore, while both Statements II and III are factually accurate, **only Statement III** has an explained **relationship** with Statement I.

Hence, the correct option is **(b)**.

Sources:

- [NASA Citation](#)
- [A true polar wander trigger for the Great Jurassic East Asian Aridification | Request PDF](#)
- [Do solar storms cause heat waves on Earth? | NOAA Climate.gov](#)
- [Scientists ID three causes of Earth's spin axis drift - NASA Science](#)

Q14. Consider the following statements:

Statement I: Article 6 of the Paris Agreement on climate change is frequently discussed in global discussions on sustainable development and climate change.

Statement II : Article 6 of the Paris Agreement on climate change sets out the principles of carbon markets.

Statement III : Article 6 of the Paris Agreement on climate change intends to promote inter-country non-market strategies to reach their climate targets.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct 15.

Ans: (a)

Explanation:

- **Article 6 of the Paris Agreement** is one of the most complex and frequently discussed elements in international climate negotiations.
 - It is at the heart of debates concerning **sustainable development and international cooperation** on climate change mitigation.
 - The reason Article 6 draws such attention globally is that it outlines frameworks for **both market and non-market-based mechanisms**, which are crucial to helping countries achieve their **Nationally Determined Contributions (NDCs)**. Hence, **statement I is correct**.
- It refers specifically to **Article 6.2 and 6.4**, which lay down the **principles of carbon markets**.
 - Article 6.2 facilitates **bilateral and multilateral transfers of carbon credits**, known as **Internationally Transferred Mitigation Outcomes (ITMOs)**, while Article 6.4 establishes a **centralized UN-supervised carbon market mechanism**, similar to the Clean Development Mechanism under the **Kyoto Protocol**. Hence, **statement II is correct**.
 - These frameworks allow countries to **trade emission reductions**, thereby reducing the overall cost of mitigation and promoting efficiency.
- **Article 6.8**, which promotes **non-market approaches**.
 - These approaches include initiatives like **capacity building, technology transfer, policy coordination, and financial support**, enabling countries to pursue climate goals through cooperation that does **not involve trading of carbon credits**. Hence, **statement III is correct**.
 - This is particularly beneficial for developing countries, where climate action also needs to align with sustainable development priorities.

Since both **Statement II and Statement III** accurately describe different components of **Article 6**, and both are the **reasons why Article 6 is heavily discussed in global climate forums**, they both **explain Statement I**.

Hence, option (a) is correct.

Sources:

- [Article 6 of the Paris Agreement | UNFCCC](#)
- Drishti IAS source: [Carbon Credits](#).

Q15. Which one of the following launched the 'Nature Solutions Finance Hub for Asia and the Pacific'?

- (a) The Asian Development Bank (ADB)
- (b) The Asian Infrastructure Investment Bank (AIIB)
- (c) The New Development Bank (NDB)
- (d) The International Bank for Reconstruction and Development (IBRD)

Ans: (a)

Explanation:

- In 2023, the Asian Development Bank (ADB) launched the Nature Solutions Finance Hub for Asia and the Pacific.
- This initiative is aimed at scaling up financing for nature-based solutions (NbS) to address climate change, biodiversity loss, and disaster risks in the region.
- **Hence, option (a) is correct.**

Sources:

- [ADB and Partners Launch Nature Financing Initiative for Asia and the Pacific | Asian Development Bank](#)

Q16. With reference to 'Direct Air Capture' (DAC), which of the following statements is/are correct?

- I. It can be used as a way of carbon sequestration.
- II. It can be a valuable approach for plastic production and in food processing.
- III. In aviation, it can be a source of carbon for combining with hydrogen to create synthetic low-carbon fuel.

Select the correct answer using the code given below.

- (a) I and II only
- (b) III only
- (c) I, II and III
- (d) None of the above statements is correct

Ans: (c)

Explanation:

- **Direct Air Capture (DAC)** technology removes **carbon dioxide (CO₂)** directly from the ambient air. The captured CO₂ can then be **permanently stored underground in geological formations**, effectively removing it from the atmosphere and achieving carbon sequestration. **Hence, statement I is correct.**
 - This process is recognized as a **negative emissions technology** and is considered important for meeting global climate targets.
- **Direct Air Capture (DAC)**, can be a valuable **approach for plastic production** and in **food processing**. **Captured CO₂ can be converted into ethylene or methanol**, which are building blocks for **producing polyethylene and other plastics**.

- CO₂ captured through Direct Air Capture (DAC) can be used to produce dry ice, which has valuable applications in food processing and preservation. Hence, **statement II is correct.**
- One of the most promising uses of DAC is in the **aviation sector**, where captured atmospheric CO₂ can be combined with **green hydrogen** to create **synthetic fuels**, often referred to as **e-fuels** or **power-to-liquid fuels**. Hence, **statement III is correct.**
 - These low-carbon fuels can significantly reduce the carbon footprint of air travel, a sector where decarbonization is otherwise difficult. Several pilot projects are already underway globally, including in the U.S. and Europe, demonstrating this potential.

Hence, statements I, II and III are correct.

Sources:

- **Statement 1:** [Recent progress on direct air capture of carbon dioxide - ScienceDirect](#)
 - [Direct air capture technology: innovations in CO₂ removal](#)
 - [Direct Air Capture - Energy System - IEA](#)
 - [Current status and pillars of direct air capture technologies - ScienceDirect](#)
 - [Direct Air capture \(DAC\) deployment: A review of the industrial deployment - ScienceDirect](#)
- **Statement 2:** [Is CO₂ the Key to a More Sustainable Chemical and Fuel Industry?](#)
 - [Direct Air Capture - Energy System - IEA](#)
- **Statement 3:** [The role of direct air carbon capture in decarbonising aviation](#)

Q.17. Regarding Peacock tarantula (Gooty tarantula), consider the following statements :

- It is an omnivorous crustacean.
- Its natural habitat in India is only limited to some forest areas.
- In its natural habitat, it is an arboreal species.

Which of the statements given above is/are correct?

- I only
- I and III
- II only
- II and III

Ans: (d)

Explanation:

- The **Peacock tarantula** is an **arachnid (a spider)**, not a crustacean. It is also not omnivorous; it is a predator that primarily feeds on insects and other small invertebrates **Hence, Statement I is incorrect.**
 - It is a **critically endangered species** of spider native to India.
- It is **endemic to a small patch of forest in Andhra Pradesh**, India, particularly near the town of **Gooty**, in the **Eastern Ghats**. Hence, **statement II is correct.**
- As the species is **arboreal**, meaning it lives in trees. In its natural habitat, it resides in tree holes and crevices, spinning silken retreats and avoiding the ground unless disturbed.
 - This arboreal nature is typical of many tarantulas in the genus *Poecilotheria*. Hence, **statement III is correct.**

Hence, option (d) is correct.

Sources:

- [The Endangered Peacock Tarantula - Focused Conservation](#)
- Drishti IAS source: [Rare Tarantula Sighted in Tamil Nadu - Drishti IAS](#)

Q18. Consider the following statements:

- I. Carbon dioxide (CO₂) emissions in India are less than 0.5 t CO₂/ capita.
- II. In terms of CO₂ emissions from fuel combustion, India ranks second in the Asia-Pacific region.
- III. Electricity and heat producers are the largest sources of CO₂ emissions in India.

Which of the statements given above is/are correct?

- (a) I and III only
- (b) II only
- (c) II and III only
- (d) I, II and III

Ans: (c)

Explanation:

- According to the **International Energy Agency (IEA)**, India's per capita CO₂ emissions stood at approximately **2 tonnes in 2023**, which is significantly **higher than 0.5 tonnes**, although still **well below the global average** of around **4.6 tonnes per capita**. **Hence statement I is incorrect.**
- India is the **second-largest emitter of CO₂ from fuel combustion in the Asia-Pacific region**, behind **China**. The country's rapid economic growth, rising energy demand, and continued reliance on fossil fuels particularly coal—have contributed to this status. This has been corroborated by the **IEA** and **Global Carbon Atlas** data. **Hence, statement II is correct.**
- The **electricity and heat production sector** is the **largest contributor to CO₂ emissions in India**. As per IEA's emissions data, more than **50% of India's energy-related CO₂ emissions** in recent years have come from **coal-based power generation**, which remains the dominant source of electricity in the country. **Hence, statement III is correct.**

Hence, option (c) is correct.

Sources:

- [The changing landscape of global emissions - CO₂ Emissions in 2023 - Analysis - IEA](#)
- [India - Countries & Regions - IEA](#)

Q19. Consider the following pairs :

Plant	Description
I. Cassava	Woody shrub
II. Ginger	Herb with pseudostem
III. Malabar spinach	Herbaceous climber
IV. Mint	Annual shrub
V. Papaya	Woody shrub

How many of the above pairs are correctly matched?

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

Ans: (b)

Explanation:

- **Cassava (*Manihot esculenta*) is a woody shrub** grown widely in tropical regions for its edible starchy tuberous roots. It belongs to the Euphorbiaceae family and typically reaches up to 2-3 meters in height with a branching woody stem. **Hence, pair I is correct.**
- **Ginger (*Zingiber officinale*) is a herbaceous perennial plant.** The visible stem is actually a pseudostem, formed by the tightly wrapped bases of its leaves. Ginger is cultivated for its underground stem, or rhizome, used as a spice and medicinal product. **Hence, pair II is correct.**
- **Malabar spinach (*Basella alba*) is a succulent, fast-growing, herbaceous climber** commonly grown as a leafy vegetable in tropical Asia and Africa. It climbs using soft stems and is not a true spinach but shares similar culinary uses. **Hence, pair III is correct.**
- **Mint (*Mentha species*) is not a shrub.** It is a perennial herb, typically spreading via stolons or underground runners. It has soft, non-woody stems and grows close to the ground. The description as an annual shrub is botanically inaccurate. **Hence, pair IV is incorrect.**
- **Papaya (*Carica papaya*) is often described as a tree-like herb** due to its soft stem, but botanically it **can be classified as a fast-growing woody shrub or small tree.** Though it lacks true **secondary wood growth like trees**, its semi-woody structure and form justify its classification here. **Hence, pair V is incorrect.**

Sources:

- [Cassava - an overview | ScienceDirect Topics](#)
- [Ginger | Description, Plant, Spice, Rhizome, Uses, Flavor, & Facts | Britannica](#)
- [Malabar spinach, *Basella alba* - Wisconsin Horticulture](#)
- [Carica Papaya - an overview | ScienceDirect Topics.](#)

20. With reference to the planet Earth, consider the following statements:

- I. Rain forests produce more oxygen than that produced by oceans.
- II. Marine phytoplankton and photo synthetic bacteria produce about 50% of the world's oxygen.
- III. Well-oxygenated surface water contains several folds higher oxygen than that in atmospheric air.

Which of the statements given above is/are correct?

- (a) I and II
- (b) II only
- (c) I and III
- (d) None of the above statements is correct

Ans: (b)

Exp:

- Scientists estimate that **roughly half of the oxygen production on Earth comes from the**

ocean. The majority of this production is from oceanic plankton — drifting plants, algae, and some bacteria that can photosynthesize.

- One particular species, *Prochlorococcus*, is the smallest photosynthetic organism on Earth. But this little bacteria **produces up to 20% of the oxygen in our entire biosphere. That's a higher percentage than all of the tropical rainforests on land combined.**
- It's important to remember that although the **ocean produces at least 50% of the oxygen on Earth**, roughly the same amount is consumed by marine life. **Hence, statement 1 is not correct.**

- Scientists estimate that at least **50% of the oxygen in our atmosphere has been produced by phytoplankton.** At the same time, they are responsible for drawing down significant portions of the carbon dioxide from the air. **Hence, statement 2 is correct.**
- Oxygen content is highest at the surface water for two main reasons; this is where oxygen dissolves into the ocean from the atmosphere, and the surface water is where oxygen is produced by phytoplankton through photosynthesis.
 - Respiration is also occurring in the surface waters, but the rate of photosynthetic oxygen production is greater than the rate of removal through respiration.
 - It should be noted that **even though dissolved oxygen is highest at the surface, there is still far less oxygen in the water than is found in the air.** Well-oxygenated surface water may only contain around 8 mg O₂/l, while the air contains 210 mg O₂/l. **Hence, statement 3 is not correct.**

Sources:

- **Statement 1** - [How much oxygen comes from the ocean?](#)
- **Statement 2** - [Oxygen Factories in the Southern Ocean](#)
 - [Phenomenal Phytoplankton: Scientists Uncover Cellular Process Behind Oxygen Production | Scripps Institution of Oceanography](#)
- **Statement 3** - [5.4 Dissolved Gases: Oxygen - Introduction to Oceanography](#)
- **Drishti IAS source:** [Phytoplankton Biomass in Bay of Bengal](#)



The advertisement features a background image of a hand writing on a notepad. The text is overlaid on this image. At the top, it says 'IAS Mains Course' in large, bold, orange letters, followed by 'GS Paper 1 to 4' in white. Below this, it says 'Live Online | English Medium' in white. There are four white buttons with orange icons and text: 'Admissions Open', '150+ Classes of 300+ Hours', 'PYQs Solved Papers', and 'Free QIP Classes Available'. At the bottom right, there is a button that says 'Free Access of 12 Mock Tests'.

Q21. Consider the following statements about Raja Ram Mohan Roy:

- I. He possessed great love and respect for the traditional philosophical systems of the East.
- II. He desired his countrymen to accept the rational and scientific approach and the principle of human dignity and social equality of all men and women.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only

(c) Both I and II

(d) Neither I nor II

Ans: (c)

Exp:

- The impact of modern Western culture soon gave birth to a new awakening in India. Western conquest exposed the weakness and decay of Indian society, Thoughtful Indians began to look for the defects of their society and for ways and means of removing them. While a large number of Indians refused to come to terms with the West and still put their faith in traditional Indian ideas and institutions, others gradually came to hold that modern Western thought provided the key to the regeneration of their society.
- The central figure in this awakening was **Rammohun Roy**, who is rightly regarded as the first great leader of modern India. Rammohun Roy was moved by deep love for his people and country and worked hard all his life for their social, religious, intellectual, and political regeneration. He was pained by the stagnation and corruption of contemporary Indian society which was at that time dominated by caste and convention.
 - **Rammohan Roy possessed great love and respect for the traditional philosophic systems of the East**; but, at the same time, he believed that Western culture alone would help regenerate Indian society. **Hence, statement 1 is correct.**
 - In particular, he wanted his countrymen to accept the rational and **scientific approach and the principle of human dignity and social equality of all men and women**. He also wanted the introduction of modern capitalism and industry in the country. **Hence, statement 2 is correct.**

Hence, option (c) is correct.

Sources:

- Both statements quoted word-to-word in Bipin Chandra - History of Modern India (Chapter - *Social and Cultural Awakening in the First Half of the 19th Century*)
 - [RELIGIOUS AND SOCIAL AWKENING IN COLONIAL INDIA \(NIOS\)](#)
 - [UNIT 4 - RAJA RAM MOHAN ROY](#)
- Drishti source: [Raja Ram Mohan Roy](#)

Q22. Consider the following subjects with regard to Non-Cooperation Programme :

1. Boycott of law-courts and foreign cloth
2. Observance of strict non-violence
3. Retention of titles and honours without using them in public
4. Establishment of Panchayats for settling disputes

How many of the above were parts of the Non-Cooperation Programme?

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

Ans: (c)

Exp:

A special session of the Congress was held in Calcutta in September 1920 to finally deliberate and decide the issue of non-cooperation. It gave its assent to non-cooperation, despite some opposition by those interested in Council entry. By the time of the regular Congress Session in December 1920 held at Nagpur, the **programme of non-cooperation was accepted without opposition.**

- It involved the **surrender of government titles and honorary positions** and **boycott** of government schools and colleges, **law courts, and foreign clothes. Hence, option 1 is correct but option 3 is not correct.**
 - It could also be extended to include resignation from government service and non-payment of government taxes.
- Moreover, it was decided to **set up** national schools and colleges, establish and strengthen the **panchayats for settlement of disputes**, promotion of hand spinning and weaving, condemnation and renunciation of untouchability, maintenance of communal amity and **strict observance of non-violence. Hence, option 2 and option 4 are correct.**
 - Thus, for the first time, an open extra-constitutional programme of mass mobilisation was started by the Congress.
- **Therefore, only three of the given options are correct.**

Hence, option (c) is correct.

Sources:

- [UNIT 12 KHILAFAT AND NON- COOPERATION MOVEMENTS*](#)
- **Drishti IAS source:** [Khilafat and Non-Cooperation Movement](#)

Q23. The irrigation device called 'Araghatta' was

- (a) A water bag made of leather pulled over a pulley
- (b) A large wheel with earthen pots tied to the outer ends of its spokes
- (c) A larger earthen pot driven by bullocks
- (d) A large water bucket pulled up by rope directly by hand

Ans: (b)

Exp:

Construction of water devices in arid zones was deemed as a meritorious act. As regards the technical devices used to raise water from wells there is a lot of evidence available.

- Desinamamala refers to such terms as *agatti*, *unkaddi* and *dhenka* which mean a contrivance for drawing water in which a horizontal beam with a bucket hung on the one end functioning as a see saw on a vertical post.
- Inscriptions of southern Rajasthan especially from the regions of Jodhpur, Udaipur, Banswara, Santhor and Sirohi repeatedly refer to **irrigation with the help of araghatta or araghatta and dhimada or dhiku.**
 - The technical nature of **araghatta, generally translated as a Persian wheel**, is a matter of controversy. The essential part of the araghatta was the ghatyantra or **the device with pitchers**, usually mounted on the wheel, but not attached to its rim.
 - The ghatyantra as an irrigational device is therefore often held as a potgarland.
 - The Upamitibhavapanchakatha of Siddharshi (CE 906) **presents the most elaborate account of the device.** The araghatta, according to the text, seems to have drawn water from a reservoir which in turn received its water from an irrigation well. The text highlights the **spokes (arakas) of the wheel** which was a revolving apparatus though it does not

refer to any gearing mechanism enabling the conversion of the horizontal rotary motion into a vertical rotary motion.

- The latter feature which became visible from the fourteenth century onwards, represented the typical Persian wheel or the saqia. The prevalence of araghatta as a hydraulic machine is best demonstrated by an eleventh century panel from Mandsor (Pali district, Rajasthan) (Satpathy, not dated).

Hence, option (b) is correct.

Sources:

▪ **UNIT 17 - SCIENCE, TECHNOLOGY AND ENVIRONMENT**

Q24. Who among the following rulers in ancient India had assumed the titles 'Mattavilasa', 'Vichitrachitta' and 'Gunabhara'?

- (a) Mahendravarman I
- (b) Simhavishnu
- (c) Narasimhavarman I
- (d) Simhavarman

Ans: (a)

- Mahendravarman I (590-630 CE), became the ruler after his father -- Simhavishnu's demise. Under him the **Pallavas** became a major political power. He was a king with many accomplishments.
 - He is **known for his literary works and templebuilding activities** and he was also a skilled veena player. He promoted many artistic activities like drama, painting, music.
 - He took the titles of:
 - Mattavilasa (addicted to pleasures),
 - Chitrakarapuli (tiger among the painters),
 - Lalitankura (charming offspring),
 - Gunabhara (virtuous),
 - Chattakari (temple builder),
 - Vichitrachitta (curious-minded).
- Hence, option (a) is correct.

Sources:

▪ **UNIT 5 THE PALLAVAS, THE PANDYAS AND THE KALACHURIS***

Q25. Fa-hien (Faxian), the Chinese pilgrim, travelled to India during the reign of

- (a) Samudragupta
- (b) Chandragupta II
- (c) Kumaragupta I
- (d) Skandagupta

Ans: (b)

Exp:

- Chandragupta II (AD 375-414) also known as **Chandragupta Vikramaditya** is remembered for his patronage of art and literature.

- He is credited with maintaining nine luminaries (navaratna) in his court. The great Sanskrit poet and playwright Kalidasa was the most notable of them all.
- **The Chinese Buddhist pilgrim Fa Hien (AD 404-411) visited India during Chandragupta II's reign. He has left an account of the life of people in India in the fifth century AD.**
- Hence, option (b) is correct.

Sources:

- [THE GUPTAS AND THEIR SUCCESSORS \(NIOS\)](#)
- **Drishti IAS source:** [Free Answer Writing Practice Question For IAS Mains Exam 2023 - Drishti IAS](#)

Q26. Who among the following led a successful military campaign against the kingdom of Srivijaya, the powerful maritime State, which ruled the Malay Peninsula, Sumatra, Java and the neighbouring islands?

- (a) Amoghavarsha (Rashtrakuta)
- (b) Prataparudra (Kakatiya)
- (c) Rajendra I (Chola)
- (d) Vishnuvardhana (Hoysala)

Ans: (c)

Exp:

- Rajendra Chola I, the son of Rajaraja Chola I, led a successful and historic naval expedition against the **Srivijaya Empire in 1025 CE**.
- This campaign marked one of the most significant overseas military expeditions in Indian history.
- The Chola navy attacked and captured several important Srivijayan ports and cities across the Malay Peninsula, Sumatra, and surrounding regions.
- It had great strategic importance in Indian ocean trade. Military conflicts continued and Cholas held their sway till Koluttunga (1070CE-1122CE).

Hence, option (c) is correct.

Sources:

- [Telangana - Land & People \(Stone Age to 1323CE\)](#)
- [The Military Campaigns of Rajendra Chola and the Chola-Srivijaya-China Triangle \(Chapter 3\) - Nagapattinam to Suvarnadwipa](#)
- [The Military Campaigns of Rajendra Chola and the Chola-Srivijaya-China Triangle \(Chapter 3\) - Nagapattinam to Suvarnadwipa](#)

Q27. With reference to ancient India (600-322 BC), consider the following pairs:

Territorial region	River flowing in the region
I. Asmaka	Godavari
II. Kamboja	Vipasa
III. Avanti	Mahanadi
IV. Kosala	Sarayu

How many of the pairs given above are correctly matched?

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

Ans: (b)

Exp:

- **Asmaka** was a Mahajanapada located in the Deccan region, and the **Godavari River** flowed through this area. **Hence, pair 1 is correctly matched.**
- **Kamboja** was located in the north-western part of the Indian subcontinent, around present-day Afghanistan and Tajikistan. The Vipas (Beas) River flows in the Punjab region, not in Kamboja. **Hence, pair 2 is not correctly matched.**
- **Avanti** was a Mahajanapada located in western Madhya Pradesh, with its capital at **Ujjain**. The river associated with Avanti is the Chambal, not the Mahanadi (which flows in Odisha and Chhattisgarh). **Hence, pair 3 is not correctly matched.**
- **Kosala** was a Mahajanapada located in the region of present-day eastern Uttar Pradesh, with its capital at **Shravasti**. The **Sarayu River** flowed through it. **Hence, pair 4 is correctly matched.**

Hence, option (b) is correct.



Sl. No.	Mahajanapadas	Capital	Modern location
1	Anga	Champa	Munger and Bhagalpur
2	Magadh	Girivraja / Rajagir	Gaya and Patna
3	Kasi	Kasi	Banaras
4	Vatsa	Kausambi	Allahabad
5	Kosala	Sravasti	Eastern Uttar Pradesh
6	Saurasena	Mathura	Mathura
7	Panchala	Ahichchatra and Kampilya	Western Uttar Pradesh
8	Kuru	Indraprastha	Merrut and S.E. Haryana
9	Matsya	Viratnagar	Jaipur
10	Chedi	Sothivati / Banda	Bundelkhanda
11	Avanti	Ujjain / Mahismati	Madhya Pradesh & Malwa
12	Gandhar	Taxila	Rawalpindi
13	Kamboj	Pooncha	Rajori & Hajra (Kashmir)
14	Asmaka	Pratisthan / Paithan	Bank of Godavari
15	Vajji	Vaishali	Vaishali
16	Malla	Kusinara	Deoria & U.P.

Sources:

- [Historicity of Ayodhya](#)
- Drishti IAS Source: [UNDERSTANDING INDIAN HISTORY](#)

Q28. The first Gandharva Mahavidyalaya, a music training school, was set up in 1901 by Vishnu Digambar Paluskar in

- (a) Delhi
- (b) Gwalior
- (c) Ujjain
- (d) Lahore

Ans: (d)

Exp:

- The first Gandharva Mahavidyalaya was established by Pandit Vishnu Digambar Paluskar on 5 May 1901 in Lahore (which was then part of British India and is now in Pakistan)

Hence, option (d) is correct.

Sources:

- [Pandit Vishnu Digambar Paluskar's Musical Contribution to the Freedom Struggle.](#)
- [Home V1 - Gandharva Mahavidyalaya, North America](#)

Q29. Ashokan inscriptions suggest that the Pradeshika', Rajuka' and Yukta' were important officers at the

- (a) village-level administration
- (b) district-level administration
- (c) provincial administration
- (d) level of the central administration

Ans: (b)

Exp:

- **Ashokan inscriptions** suggest that the **Pradeshika, Rajuka, and Yukta** were important officers at the **district level**.
 - **Rock edict 3 refers** to these officers going on tours every five years in order to instruct people in dhamma and for other purposes.
- The term yukta occurs in the Arthashastra as a general term for officers,
- Bongard-Levin suggests that the rajukas of the inscriptions can be identified with the agronomoi of Megasthenes, who seem to have been connected with the measurement of land for purposes of revenue assessment.
- The term rajuka may come from rajju, meaning rope, and the reference may be to the measurement of land using ropes.
- Though land measurement may have been their main or original duty, in Ashoka's time, the rajukas seem to have been high-ranking officers who were also associated with public welfare measures.

Hence, option (b) is correct.

Sources:

- **A History of Ancient and Early Medieval India (Upinder Singh) 2nd Edition (ebook page 951)**

Q.30. Consider the following statements in respect of the *Non-Cooperation Movement* :

I. The Congress declared the attainment of 'Swaraj' by all legitimate and peaceful means to be its objective.

II. It was to be implemented in stages with civil disobedience and non-payment of taxes for the next stage only if 'Swaraj' did not come within a year and the Government resorted to repression.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II

(d) Neither I nor II

Ans: (c)

Exp:

- The fundamental change in the policy and methods of the Congress was reflected in Article 1 of the Constitution adopted in 1921 : **“The object of the Indian National Congress is the attainment of Swarajya by the people of India by all legitimate and peaceful means.”** In other words, self government within the British Empire was no longer to be attained solely through ‘constitutional’ means; unconstitutional means, provided they were ‘legitimate and peaceful’, might also be employed. This change in the fundamental character of the Congress came in the very year (1921) of the inauguration of the Montford Reforms and boded ill for its successful working. **Hence, statement 1 is correct.**
- Gandhiji proposed that the movement **should unfold in stages**. It should begin with the surrender of titles that the government awarded, and a boycott of civil services, army, police, courts and legislative councils, schools, and foreign goods. Then, **in case the government used repression**, a full civil disobedience campaign would be launched. Through the summer of 1920 Mahatma Gandhi and Shaukat Ali toured extensively, mobilising popular support for the movement. **Hence, statement 2 is correct.**

Hence, option (c) is correct.

Sources:

- **BL Grover (P.400)**
- [NCERT](#)



Location	Date	Time
Noida	4 June	8:00 AM
Jaipur	9 June	5:00 PM
Karol Bagh	16 June	8:00 AM
Lucknow	16 June	6:00 PM
Indore	18 June	8:00 AM
Prayagraj	Admissions Open	

87501 87501

Q.31 With reference to investments, consider the following:

- Bonds
- Hedge Funds
- Stocks
- Venture Capital

How many of the above are treated as Alternative Investment Funds?

- Only one
- Only two

- (c) Only three
(d) All the four

Answer: (b)

Explanation:

Alternative Investments Funds: These are financial assets that **do not fall into the conventional categories of stocks, bonds, or cash.**

- Examples **include hedge funds, venture capital, private equity, real estate,** commodities.
- Both venture capital funds and hedge funds are classified as Alternative Investment Funds (AIFs) under Indian regulations, specifically as per the SEBI (Alternative Investment Funds) Regulations, 2012.
 - **Bonds are traditional investment instruments. They fall under fixed-income securities regulated separately.**
 - **Stocks are conventional equity investments.**
 - **Hence, option (b) is correct.**

Sources:

- [What Are Alternative Investments? Definition and Examples](#)
- Drishti IAS source: [Ubharte Sitaare Alternative Investment Fund](#)

Q32. Which of the following are the sources of income for the Reserve Bank of India?

- I. Buying and selling Government bonds
- II. Buying and selling foreign currency
- III. Pension fund management
- IV. Lending to private companies
- V. Printing and distributing currency notes

Select the correct answer using the code given below.

- (a) I and II only
- (b) II, III and IV
- (c) I, III, IV and V
- (d) I, II and V

Answer: (d)

- The **Reserve Bank of India (RBI)** is the **central bank of India**, established on 1st **April 1935**, under the **Reserve Bank of India Act, 1934**. It serves as the apex monetary authority, regulator of the banking system, and issuer of currency in India. The RBI does not function like a commercial bank; its income mainly arises from its regulatory and monetary functions. Key sources include:
 - **Buying and selling government bonds:** The RBI conducts **Open Market Operations (OMOs)** by purchasing and selling government securities.
 - It earns **interest income** from the government bonds held in its portfolio. This remains one of its **primary sources of revenue.**
 - **Buying and selling foreign currency:** It earns **profits from exchange rate**

movements and interest on foreign assets.

- **Printing and distributing currency notes:** The RBI earns income from printing and distributing currency notes primarily through a process called seigniorage.
 - Seigniorage is the profit that accrues to the central bank because the face value of the currency it issues is much higher than the cost of producing and distributing those notes.
 - For example, if it costs the RBI ₹3 to print a ₹100 note, the seigniorage income is ₹97 per note.
 - The RBI sells these notes to commercial banks at face value, and the difference between the face value and the production cost constitutes a significant source of revenue for the central bank.
- **Pension fund management (III) and lending to private companies (IV) are not sources of income for the RBI. Therefore, only I, II and V are correct.**

Hence, option (d) is correct.

Sources:

- [Reserve Bank of India - Annual Report](#)
- [How RBI earns profit, decides dividend: Explained - Times of India](#)
- [Where does the RBI's surplus come from? | Explained - The Hindu](#)
- **Drishti IAS source:** [RBI Surplus Transfer to Government](#)

Q33. With reference to the Government of India, consider the following information:

Organisation	Some of its functions	It works under
1. Directorate of Enforcement	Enforcement of the Fugitive Economic Offenders Act, 2018	Internal Security Division-1, Ministry of Home Affairs
2. Directorate of Revenue Intelligence	Enforces the Provisions of the Customs Act, 1962	Department of Revenue, Ministry of Finance
3. Directorate General of Systems and Data Management	Carrying out big data analytics to assist tax officers for better policy and nabbing tax evaders	Department of Revenue, Ministry of Finance

In how many of the above rows is the information correctly matched?

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

Ans: (b)

I. Directorate of Enforcement

- **Function:** Enforcement of the Fugitive Economic Offenders Act, 2018 is Correct.
- **Works under: Internal Security Division-I, Ministry of Home Affairs — Not correct.**
 - The Directorate of Enforcement (**ED**) works under the Department of Revenue,

Ministry of Finance, not the Ministry of Home Affairs.

- **Fugitive Economic Offenders Act, 2018 (FEOA):** Lately, with the increase in the number of cases relating to economic offenders taking shelter in foreign countries, the Government of India introduced the Fugitive Economic Offenders Act, 2018 (FEOA) and ED is entrusted with its enforcement.
- Hence, pair I is NOT correctly matched.

II. Directorate of Revenue Intelligence

- **Function:** Enforces the provisions of the Customs Act, 1962.
- **Works under:** Department of Revenue, Ministry of Finance- correct.
- **DRI enforces the provisions of the Customs Act, 1962 and over fifty other allied Acts including the Arms Act, NDPS Act, COFEPOSA, Wildlife Act, Antiquities Act etc.**
- Hence, pair II is correctly matched.

III. Directorate General of Systems and Data Management

- **Function:** Carrying out big data analytics to assist tax officers for better policy and nabbing tax evaders — **Correct.**
- **Works under:** Department of Revenue, Ministry of Finance.
- Hence, pair III is correctly matched.

Hence, option (b) is correct.

Sources:

- [Directorate of Enforcement \(ED\)](#).
- [Government of India, Directorate of Revenue Intelligence](#)
- [IceGate : e-Commerce Portal of Central Board of Excise and Customs](#)
- **Drishti IAS source:** [Directorate of Enforcement \(ED\)](#)

Q34. Consider the following statements

- I. The Reserve Bank of India mandates all the listed companies in India to submit a Business Responsibility and Sustainability Report (BRSR).
- II. In India, a company submitting a BRSR makes disclosures in the report that are largely non-financial in nature.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Answer: (b)

Explanation:

- The Reserve Bank of India (RBI) **does not mandate the submission of the Business Responsibility and Sustainability Report (BRSR)**. Instead, it is the Securities and Exchange Board of India (SEBI) that mandates BRSR, and only for the top 1,000 listed companies by market capitalization—not all listed companies. **Hence, statement (1) is NOT correct.**
- The **BRSR requires companies to make disclosures that are largely non-financial in nature**, focusing on environmental, social, and governance (ESG) factors. **Hence, Statement II**

is correct.

Hence, option (b) is correct.

Sources:

- [BRSR Reporting in India: Full Form, Applicability, Format, Guidelines, Benefits](#)
- Drishti IAS source: [Business Responsibility and Sustainability Reporting Framework](#)

Q35. Consider the following statements:

Statement I : In India, income from allied agricultural activities like poultry farming and wool rearing in rural areas is exempted from any tax.

Statement II : In India, rural agricultural land is not considered a capital asset under the provisions of the Income-tax Act, 1961.

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 explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct Statement II is not correct but
- (d) Statement I is not correct but Statement II is correct

Answer: (d)

Explanation

- As per the Income Tax Act, **only income derived directly from agricultural activities (like crop cultivation) is exempt from tax.**
 - Income from **allied activities** such as poultry farming, dairy, wool rearing, etc., is **NOT** considered agricultural income and is, therefore, taxable.
 - Hence, statement I is **NOT** correct.
- As per **Section 2(14) of the Income Tax Act**, rural agricultural land is not classified as a **capital asset**. Therefore, any gains from its sale are not subject to capital gains. Hence, **statement II is correct.**

Hence, statement (d) is correct.

Sources:

- [What is agriculture income, different types of Agriculture Income? - The Economic Times](#)
- [How to Save Tax on Capital Gains on Sale of Agricultural Land](#)
- [Agricultural Land: Rules, Regulations, and Tax Implications](#)

Q36. Consider the following statements:

I. India has joined the Minerals Security Partnership as a member.

II. India is a resource-rich country in all the 30 critical minerals that it has identified.

III. The Parliament in 2023 has amended the Mines and Minerals (Development and Regulation) Act, 1957 empowering the Central Government to exclusively auction mining lease and composite license for certain critical minerals.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (c)

Explanation

- **India joined the US-led Minerals Security Partnership (MSP) in June 2023** during Prime Minister Narendra Modi's visit to the United States.
 - The **MSP includes 14 countries and the European Union**, focusing on securing global critical mineral supply chains. **Hence, statement 1 is correct.**
- While India has identified 30 critical minerals (e.g., lithium, cobalt, nickel, graphite), **it is not self-sufficient in all of them (not a resource-rich country vis-a-vis all 30 minerals).**
 - For example, **India relies entirely on imports for lithium, cobalt, nickel**, and other minerals critical for clean energy and electronics. **Hence, statement 2 is NOT correct.**
- The MMDR Amendment **Act, 2023 empowers the Central Government to exclusively conduct auctions for mining lease and composite licence for 24 critical minerals.**
 - This amendment aims **to accelerate exploration and reduce import dependency** by involving private and foreign investment in deep-seated and critical minerals.

Hence, option (c) is Correct.

Sources:

- [Press Release:Press Information Bureau](#)
- [Thirty Minerals Listed as Critical Minerals for India Details of Critical Mineral Blocks Notified for Auction.](#)
- [Press Release:Press Information Bureau](#)

Q 37. Consider the following statements:

Statement I: As regards returns from an investment in a company, generally, bondholders are considered to be relatively at lower risk than stockholders.

Statement II: Bondholders are lenders to a company whereas stockholders are its owners.

Statement III: For repayment purpose, bondholders are prioritized over stockholders by a company.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement I and Statement II are correct and Statement I explains Statement II
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (a)

Explanation

- **Bondholders face lower risk compared to stockholders because they have fixed interest payments and priority in repayment**, while stockholders' returns are variable and depend on company performance.
 - **Hence, statement 1 is correct.**
- Bondholders lend money to the company and are creditors, while stockholders buy shares and become part-owners of the company.
 - **Hence, statement 2 is correct.**
- In the **event of liquidation or bankruptcy, bondholders are paid before stockholders**. This priority in repayment reduces the risk for bondholders relative to stockholders.
 - **Hence, statement 3 is correct.**

Hence, option (a) is correct.

Sources:

- [Bondholder: Definition, Risks and Rewards, Taxes](#)
- [Shareholder \(Stockholder\): Definition, Rights, and Types](#)

Q 38. Consider the following statements:

- India accounts for a very large portion of all equity option contracts traded globally thus exhibiting a great boom.
- India's stock market has grown rapidly in the recent past even overtaking Hong Kong's at some point of time.
- There is no regulatory body either to warn the small investors about the risks of options trading or to act on unregistered financial advisors in this regard.

Which of the statements given above are correct?

- I and II only
- II and III only
- I and III only
- I, II and III

Answer: (a)

Explanation

- **India has become the world's largest market for equity options by contracts traded, accounting for over 84% of all equity option contracts globally in 2023 and the first quarter of 2024.**
 - This represents a dramatic surge and is widely described as a "boom" in options trading.
 - **Hence, statement 1 is correct.**
- **In January 2024, India's stock market capitalization surpassed Hong Kong's, making India the world's fourth-largest equity market.**
 - **Hence, statement 2 is correct.**
- **The Securities and Exchange Board of India (SEBI)-India's active regulatory body.** SEBI regularly issues warnings to investors about the risks of options trading and has recently implemented new rules to curb unregistered financial advisors and protect retail investors.
 - SEBI's regulatory interventions include stricter rules for options trading, investor education initiatives, and crackdowns on unregistered advisors.
 - **Hence, Statement III is NOT correct.**

Hence, option (a) is correct.

Sources:

- [Equity options boom: Retail frenzy a growing concern as “sachetisation” of option plans draws in younger investors from small towns | Business News - The Indian Express](#)
- [Sebi plans to introduce some changes to address option trading risks: Report - The Times of India](#)
- [India overtakes Hong Kong as world's fourth-largest stock market - Times of India](#)
- Drishti IAS sources: [Indian Stock Market is Fourth-largest Globally.](#)
 - [Options Writing](#)
 - [Finfluencers](#)

Q39. Consider the following statements:

Statement I : Circular economy reduces the emissions of greenhouse gases.

Statement II : Circular economy reduces the use of raw materials as inputs.

Statement III : Circular economy reduces wastage in the production process.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (a)

Explanation

- The **circular economy minimizes GHG emissions by reducing reliance on energy-intensive extraction** and production of virgin **materials**.
 - For example, reusing materials lowers emissions from manufacturing by 20-90% compared to using virgin resources.
 - **Hence, statement 1 is correct.**
- A **core principle of the circular economy is to eliminate waste** and pollution by **keeping materials in use through reuse, repair, and recycling**. This reduces demand for virgin raw materials like minerals, metals, and fossil fuels.
 - **Hence, statement 2 is correct.**
- The **circular economy designs out waste by prioritizing durability, repairability, and recyclability**.
 - For example, refurbishing products instead of discarding them prevents material loss.
 - By closing material loops, waste generation is minimized at every stage of production.
 - **Hence, statement 3 is correct.**

Hence, option (a) is correct.

Sources:

- [Circular economy strategies can cut global emissions by 39% - Circle Economy](#)
- Drishti IAS source: [India's Circular Revolution](#)
 - [Promoting Circular Economy](#)

Q40. Consider the following statements:

I. Capital receipts create a liability or cause a reduction in the assets of the Government.

II. Borrowings and disinvestment are capital receipts.

III. Interest received on loans creates a liability of the Government.

Which of the statements given above are correct?

(a) I and II only

(b) II and III only

(c) I and III only

(d) I, II and III

Answer: (a)

Explanation

- **Capital receipts are defined as receipts that either create a liability (e.g., borrowings) or reduce assets (e.g., disinvestment).**
 - Example: Borrowing increases government liabilities, while selling shares in a PSU reduces assets.
 - **Hence, statement 1 is correct.**
- Borrowings (e.g., loans, bonds) create a liability, making them capital receipts.
 - Disinvestment (sale of government assets like PSU shares) reduces assets, also qualifying as capital receipts.
 - **Hence, statement 2 is correct.**
- **Interest received on loans is a revenue receipt**, not a capital receipt. It does not create a liability; instead, it is income for the government.
 - Example: Interest from loans granted to states or PSUs is recurring income and classified under non-tax revenue.
 - **Hence, statement 3 is NOT correct.**

Hence, option (a) is correct.

Sources:

- [CAG Report](#)
- Drishti IAS source: [Government Budgeting](#)



IAS Mains Course
GS Paper 1 to 4
Live Online | English Medium

Admissions Open

- 150+ Classes of 300+ Hours
- Free QIP Classes Available
- PYQs Solved Papers
- Free Access of 12 Mock Tests

41. Consider the following countries:

I. Austria

II. Bulgaria

III. Croatia

IV. Serbia

V. Sweden

VI. North Macedonia

How many of the above are members of the North Atlantic Treaty Organization?

(a) Only three

(b) Only four

(c) Only five

(d) All the six

Answer: (b)

Explanation:

▪ **North Atlantic Treaty Organization (NATO):**

- It is an intergovernmental military alliance formed in 1949. It was established with the primary goal of providing collective defence against potential aggression, particularly from the Soviet Union during the Cold War era.
- Over the years, NATO has evolved to address a range of security challenges beyond its original mandate.

▪ **NATO Members:**

- The original 12 founding members of NATO were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.
- NATO has expanded since its founding, with new member countries joining in multiple rounds. The alliance currently consists of **32 member** countries.
- **Bulgaria, Croatia, Sweden, and North Macedonia** are members of NATO.
- **Austria and Serbia** are **not NATO members**; both maintain military neutrality.
- **Sweden** joined NATO in 2024.
- Therefore, **four of the listed countries are NATO members.**

Hence, option B is correct.

Sources:

- [Topic: NATO member countries](#)
 - [NATO's 75th Anniversary](#)
 - Drishti IAS source: [North Atlantic Treaty Organization \(NATO\)](#)
-

42. Consider the following countries:

- I. Bolivia
- II. Brazil
- III. Colombia
- IV. Ecuador
- V. Paraguay
- VI. Venezuela

Andes mountains pass through how many of the above countries?

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

Answer: (c)

Explanation:

▪ **Andes:**

- The Andes Mountains are the longest mountain range in the world, spanning about 7,000 kilometers (4,350 miles) along the western edge of South America.
- These are the mountain systems of South America with an average height of 8,900 kilometres.
- It ranges from the southern tip of South America to the continent's northernmost coast on the Caribbean covering parts of **seven South American countries- Argentina, Bolivia, Chile, Colombia, Ecuador, Peru, and Venezuela.**
- The Andes are home to some of the world's highest peaks, active volcanoes, ancient ruins, and unique ecosystems.

Hence, option C is correct.

Sources:

- [Chilean Andes - NASA](#)
- **Drishti IAS Source:** [Mains Practice Questions - Geography](#)

43. Consider the following water bodies:

- I. Lake Tanganyika
- II. Lake Tonlé Sap
- III. Patos Lagoon

Through how many of them does the equator pass?

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

Answer: (d)

Explanation:

- **Lake Tanganyika:** Located in Africa, its northern tip is very close to, **but does not cross, the equator.**
- **Lake Tonlé Sap:** Located in Cambodia, **well north of the equator.**
 - Thirteen nations—Ecuador, Colombia, Brazil, Sao Tome & Principe, Gabon, the Democratic Republic of the Congo, Uganda, Kenya, Somalia, the Maldives, Indonesia, and Kiribati—are traversed by the Equator.
 - **Since the equator does not pass through Cambodia, it does not pass through Lake Tonlé Sap also.**
- **Patos Lagoon:** Located in southern Brazil, well south of the equator, even below the Tropic of Capricorn
- The equator passes through none of these lakes, though Lake Tanganyika is very close.

Hence, option D is correct.

Sources:

- [Lake Tanganyika | Size, Map, Facts, Depth, & Wildlife | Britannica](#)
- [Tonle Sap | Lake, Cambodia, Fishing, & Map | Britannica](#)
- [Patos Lagoon | Saltwater, Migratory Birds, Wetlands | Britannica](#)

44. Consider the following statements about turmeric during the year 2022-23:

- I. India is the largest producer and exporter of turmeric in the world.
- II. More than 30 varieties of turmeric are grown in India.
- III. Maharashtra, Telangana, Karnataka and Tamil Nadu are major turmeric producing States in India.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (d)

Explanation:

- **Turmeric:**
 - It is an underground stem of the *Curcuma longa* plant, which is part of the ginger family (Zingiberaceae).
 - Curcumin, the active compound in turmeric, gives it its yellow color and is known for its anti-inflammatory, antioxidant, and antimicrobial benefits.
- **Cultivation:** India **grows over 30 varieties** of turmeric across 20+ states, with major production in Maharashtra, Telangana, Karnataka, and Tamil Nadu. **Hence, statement 2 and are correct.**
- **GI Tag:** Lakadong turmeric (Meghalaya), Kandhamal turmeric (Odisha), Erode turmeric (Tamil Nadu), Armoor turmeric (Nizamabad, Telanagan) among others have got GI tag.
 - A GI tag is a label given to a product linked to a specific region, with qualities or characteristics unique to that area.
- **Global Position:** India is the **largest producer, consumer, and exporter** of turmeric globally.
 - In 2022-23, India produced over 75% of the world's turmeric and holds 62% of the global export market. **Hence, statement 1 is correct.**
- **Export Performance:** In 2022-23, India exported 1,53,400 tonnes of turmeric and turmeric products valued at USD 207.45 million.
 - Key export markets include Bangladesh, UAE, the US, and Malaysia.

Hence, option D is correct.

Sources:

- [Government of India notifies establishment of National Turmeric Board](#)
- [Key Findings of the Report Making India the Global Hub for Turmeric](#)
- Drishti IAS source: [National Turmeric Board](#)

Q45. Which of the following are the evidences of the phenomenon of continental drift?

- I. The belt of ancient rocks from Brazil coast matches with those from Western Africa.
- II. The gold deposits of Ghana are derived from the Brazil plateau when the two continents lay side by side.
- III. The Gondwana system of sediments from India is known to have its counterparts in six different landmasses of the Southern Hemisphere.

Select the correct answer using the code given below.

- (a) I and III only
- (b) I and II only
- (c) I, II and III
- (d) II and III only

Answer: (c)

Explanation:

- **Continental Drift Theory:**
 - It deals with the distribution of the oceans and the continents. It was first suggested by a German meteorologist, Alfred Wegener in 1912.
 - According to the theory, all the continents formed a single continental mass- Pangea and mega ocean- Panthalassa surrounded it.
 - Around 200 million years ago Pangaea started splitting and broke down into two large continental masses as Laurasia and Gondwanaland forming the northern and southern components respectively.
 - Subsequently, Laurasia and Gondwanaland continued to break into various smaller continents that exist today.

▪ **Evidence of continental drift theory:**

- **The Matching of Continents (Jig-Saw-Fit):** The shorelines of Africa and South America facing each other match remarkably.
- **Rocks of Same Age Across the Oceans:** Radiometric dating methods have correlated the rock formation in different continents. The ancient rocks belts on the coast of Brazil match with those found in Western Africa. **Hence, statement 1 is correct.**
- **Tillite:** The glacial tillite found in Gondwana system of sediments has its resemblance to six different landmasses of the Southern Hemisphere. Counterparts of this succession are found in Africa, Falkland Island, Madagascar, Antarctica and Australia besides India. **Hence, statement 3 is correct.**
- **Placer Deposits:** The placer deposits of gold in the Ghana coast do not have source rock in the region. The gold deposits of Ghana have been derived from the Brazil plateau when the two continents lay side by side. **Hence, statement 2 is correct.**
- **Distribution of Fossils:** identical species of plants and animals adapted to living on land or in freshwater are found on either side of the marine barriers. For example remains of Mesosaurus, a freshwater crocodile-like reptile that lived during the early Permian (between 286 and 258 million years ago), are found solely in Southern Africa and Eastern South America.

Thus, All the three statements are correct.

Hence, option C is correct.

Sources:

- **NCERT Class 11 - Geography Part 1**
- **Drishti source:** [Mains Practice Questions - Geography](#)

Q46. Consider the following statements:

Statement I: The amount of dust particles in the atmosphere is more in subtropical and temperate areas than in equatorial and polar regions.

Statement II: Subtropical and temperate areas have less dry winds.

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 explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: C

Explanation:

- Atmosphere has a sufficient capacity to keep small solid particles, which may originate from different sources and include sea salts, fine soil, smoke-soot, ash, pollen, dust and disintegrated particles of meteors. Dust particles are generally concentrated in the lower layers of the atmosphere; yet, convectional air currents may transport them to great heights.
- The higher concentration of dust particles is found in subtropical and temperate regions due to dry winds in comparison to equatorial and polar regions. **Hence, Statement I is correct but Statement II is not correct.**
- Dust and salt particles act as hygroscopic nuclei around which water vapour condenses to produce clouds.

Hence, option C is correct.

Sources:

▪ NCERT - UNIT IV: CLIMATE

Q47. Consider the following statements:

Statement I: In January, in the Northern Hemisphere, the isotherms bend equatorward while crossing the landmasses, and poleward while crossing the oceans.

Statement II: In January, the air over the oceans is warmer than that over the landmasses in the Northern Hemisphere.

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 explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: (a)

Explanation:

▪ Isotherms:

- The temperature distribution is generally shown on the map with the help of isotherms. The Isotherms are lines joining places having equal temperature.

▪ Distribution of Temperature:

- In general the effect of the latitude on temperature is well pronounced on the map, as the isotherms are generally parallel to the latitude. The deviation from this general trend is more pronounced in January than in July, especially in the northern hemisphere. In the northern hemisphere the land surface area is much larger than in the southern hemisphere. Hence, the effects of landmass and the ocean currents are well pronounced.
- **In January the isotherms deviate to the north (polewards) over the ocean and to the south (equatorwards) over the continent.** This can be seen on the North Atlantic Ocean. The presence of warm ocean currents, Gulf Stream and North Atlantic drift, make the Northern Atlantic Ocean warmer and the isotherms bend towards the north. **Over the land the temperature decreases sharply and the isotherms bend towards south in Europe. Hence, Both Statement I and Statement II are correct and Statement II explains Statement I**

Hence, option A is correct.

Sources:

▪ NCERT - Class 11 - Geography Part 1

Q48. Consider the following statements:

Statement I: In the context of effect of water on rocks, chalk is known as a very permeable rock whereas clay is known as quite an impermeable or least permeable rock.

Statement II: Chalk is porous and hence can absorb water

Statement III: Clay is not at all porous.

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

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

Answer: (c)

Explanation:

- **Chalk:** Highly porous and permeable, allowing water absorption.
- **Clay:** Has very fine pores, making it almost impermeable, but not completely non-porous.
- So, only Statement II is correct and it explains Statement I.

Hence, option C is correct.

Sources:

- [Porosity and Permeability](#)
- [What is Chalk?](#)

49. Consider the following statements:

- I. Without the atmosphere, temperature would be well below freezing point everywhere on the Earth's surface.
- II. Heat absorbed and trapped by the atmosphere maintains our planet's average temperature.
- III. Atmosphere's gases, like carbon dioxide, are particularly good at absorbing and trapping radiation.

Which of the statements given above are correct?

- (a) I and III only
- (b) I and II only
- (c) I, II and III
- (d) II and III only

Answer: (c)

Explanation:

- The atmosphere is a mixture of gases that surrounds the Earth. It helps make life possible by providing us with air to breathe, shielding us from harmful ultraviolet (UV) radiation coming from the Sun, trapping heat to warm the planet, and preventing extreme temperature differences between day and night.
 - Without the atmosphere, temperatures would be well below freezing everywhere on Earth's surface (**Hence, statement 1 is correct**).
 - Instead, the heat absorbed and trapped by our atmosphere keeps our planet's average surface temperature at a balmy 15°C (59°F), **Hence, statement 2 is correct**.

- Some of the atmosphere's gases, like carbon dioxide, are particularly good at absorbing and trapping radiation. Changes in the amounts of these gases directly affect our climate (**Hence, statement 3 is correct**).

Hence, option C is correct.

Sources:

- [What Is the Atmosphere? | Center for Science Education](#)
- **Drishti sources:**
 - [Composition and Layers of Earth's Atmosphere](#)
 - [Atmosphere and Its Layers](#)

Q50. Consider the following statements about the Rashtriya Gokul Mission:

- I. It is important for the upliftment of rural poor as majority of low producing indigenous animals are with small and marginal farmers and landless labourers.
- II. It was initiated to promote indigenous cattle and buffalo rearing and conservation in a scientific and holistic manner.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Answer: (c)

Explanation:

- The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds. Scheme is crucial for upliftment of rural poor as more than **80% of low producing** indigenous animals are with small and marginal farmers and landless labourers **Hence, statement 1 is correct.**
 - The scheme is important in enhancing milk production and productivity of bovines to meet growing demand of milk and making dairying more remunerative to the rural farmers of the country.
- One of the objective of the scheme is to enhance productivity of bovines and increasing milk production in a sustainable manner using advance technologies. **Hence, statement 2 is correct.**

Hence, option C is correct.

Sources:

- [Rashtriya Gokul Mission](#)
- **Drishti IAS source:** [Rashtriya Gokul Mission](#)

Simplify Doubts, Strengthen Concepts

IAS GS Foundation Course 2025

UPSC Prelims + Mains | Live Online Batch

AI Summary

Instant Summary of the Lecture

AI Quiz

Take AI Generated Quiz Based on the Lecture

Ask Me a Question

Instant AI - Powered Answer

Admissions Open

📞 87501 87501

Q51. Consider the following statements:

I. Panchayats at the intermediate level exist in all States.

II. To be eligible to be a Member of a Panchayat at the intermediate level, a person should attain the age of thirty years.

III. The Chief Minister of a State constitutes a commission to review the financial position of Panchayats at the intermediate levels and to make recommendations regarding the distribution of net proceeds of taxes and duties, leviable by the State, between the State and Panchayats at the intermediate level.

Which of the statements given above are not correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Ans: (d)

Explanation:

▪ Panchayats:

- The **73rd Amendment Act, 1992** gave **constitutional status** to the panchayati raj institutions. It has brought them under the purview of the **justiciable part** of the Constitution.

▪ Salient Features:

- The act provides for a **three-tier system** of panchayati raj in every state, that is, panchayats at the **village, intermediate, and district levels**. However, a state having a **population not exceeding 20 lakh** may **not constitute** panchayats at the **intermediate level**. Hence, **statement I is not correct**.
- No person shall be disqualified on the ground that he is less than 25 years of age if he has attained the age of 21 years. It means the **minimum age** to be eligible to be a member of a Panchayat at the intermediate levels is **21 years**. Hence, **statement II is not correct**.
- The **governor (not Chief Minister)** of a state shall, after **every five years**, constitute a **finance commission** to review the **financial position** of the **panchayats** and to make recommendations regarding the distribution of **net proceeds of taxes and duties, leviable** by the State, between the State and Panchayats including at the **intermediate level**. Hence, **statement III is not correct**.

Hence, option (d) is correct.

Sources:

- Chapter: 38, Panchayati Raj of Indian Polity by M. Laxmikanth.
- Drishti IAS source: [Panchayati Raj Institution \(PRI\)](#)

Q.52 Consider the following statements in respect of BIMSTEC:

- It is a regional organization consisting of seven member States till January 2025.
- It came into existence with the signing of the Dhaka Declaration, 1999.
- Bangladesh, India, Sri Lanka, Thailand and Nepal are founding member States of BIMSTEC.
- In BIMSTEC, the subsector of 'tourism' is being led by India.

Which of the statements given above is/are correct?

- I and II
- II and III
- I and IV
- I only

Ans: (d)

Explanation:

- **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC):**
 - BIMSTEC is a **regional organization** that aims to foster multifaceted **technical and economic cooperation** among countries in the **Bay of Bengal region**.
- **Key Facts in respect of BIMSTEC:**
 - It comprises **7 member states** i.e., **Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand** till January 2025. **Hence, statement I is correct**
 - It came into existence with the **adoption of the Bangkok Declaration, 1997**. **Hence, statement II is not correct.**
 - **Bangladesh, India, Sri Lanka, and Thailand** are founding member States of BIMSTEC then known as **BIST-EC (Economic Cooperation)**.
 - In **1997, Myanmar** joined, and the grouping was renamed **BIMST-EC**.
 - With the inclusion of **Nepal and Bhutan in 2004**, the name was further changed to **BIMSTEC**. **Hence, statement III is not correct.**
 - In BIMSTEC, the subsector of 'tourism' is being led by **Nepal**. **Hence, statement IV is not correct.**

Hence, option (d) is correct.

Sources:

- [History - Home-The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic](#)
- [Tourism - Home-The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic](#)
- Drishti IAS source: [6th BIMSTEC Summit](#)

Q53. Who amongst the following are members of the Jury to select the recipient of

- 'Gandhi Peace Prize'?
- The President of India

III. The Prime Minister of India

IV. The Chief Justice of India

V. The Leader of Opposition in the Lok Sabha

Select the correct answer using the code given below.

(a) II and IV only

(b) I, II and III

(c) II, III and IV

(d) I and III only

Ans: (c)

Explanation:

▪ **Gandhi Peace Prize:**

- Gandhi Peace Prize was instituted in the year **1995**, on the occasion of the **125th birth anniversary of Mahatma Gandhi**, as a tribute to his ideals and contributions to humanity.
- The award is conferred by the **President** of India at a function in **Rashtrapati Bhavan**.

▪ **Jury Members:**

- Gandhi Peace Prize jury consists of **five-member headed by the Prime Minister**.
- Other members include:
 - The **Chief Justice of India** and the **Leader of Opposition in Lok Sabha** are its permanent members.
 - Two other jury members are **nominated** for a period of **three years**.

Hence, option (c) is correct.

Sources:

- [Venkaiah Naidu nominated jury member of Gandhi Peace Prize](#)
- [Drishti IAS source: Gandhi Peace Prize](#)

Q54. GPS-Aided Geo Augmented Navigation (GAGAN) uses a system of ground stations to provide necessary augmentation. Which of the following statements is/are correct in respect of GAGAN?

I. It is designed to provide additional accuracy and integrity.

II. It will allow more uniform and high quality air traffic management.

III. It will provide benefits only in aviation but not in other modes of transportation.

Select the correct answer using the code given below.

(a) I, II and III

(b) I only

(c) II and III only

(d) I and II only

Ans: (d)

Explanation:

- **GPS Aided GEO Augmented Navigation (GAGAN):**
 - The **Indian Space Research Organization (ISRO)** and the **Airports Authority of India (AAI)** have implemented the GAGAN project as a **Satellite Based Augmentation System** for the Indian Airspace..
- **Key Features:**
 - The GAGAN is designed to provide the **additional accuracy, availability, and integrity** necessary to enable users to rely on GPS for all phases of flight, from en route through approach for all qualified airports within the GAGAN service volume. **Hence, statement I is correct.**
 - GAGAN will also provide the capability for **increased accuracy** in position reporting, allowing for **more uniform and high-quality Air Traffic Management (ATM)**. **Hence, statement II is correct.**
 - In addition, GAGAN will provide **benefits beyond aviation** to all modes of transportation, including **maritime, highways, railroads and public services** such as **defense services, security agencies, telecom industry** and personal users of position location applications. **Hence, statement III is not correct.**

Hence, option (d) is correct.

Sources:

- [GAGAN: GPS Aided GEO Augmented Navigation](#)
- Drishti IAS source: [GPS Aided GEO Augmented Navigation](#)

Q55. Consider the following statements regarding AI Action Summit held in Grand Palais, Paris in February 2025:

- I. Co-chaired with India, the event builds on the advances made at the Bletchley Park Summit held in 2023 and the Seoul Summit held in 2024.
- II. Along with other countries, the US and UK also signed the declaration on inclusive and sustainable AI.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Ans: (a)

Explanation:

- The **AI Action Summit** is a global forum that brings together **world leaders, policymakers, technology experts, and industry representatives** to discuss AI governance, ethics, and its role in society.
- **Co-chaired by India** and France, the AI Action Summit in Paris is the **3rd summit**, following the **Bletchley Park Summit (UK 2023)** and the **Seoul Summit (South Korea 2024)**. **Hence, statement I is correct.**
 - **Bletchley Park Declaration (28 countries):** Advocated **safe, human-centric, and responsible AI**.
 - **Seoul Summit (27 nations):** Reaffirmed international cooperation and proposed a

network of **AI Safety Institutes**.

- **“Joint Statement on ‘Inclusive and Sustainable Artificial Intelligence for People and the Planet’** was signed by **58 countries** including India, China, EU, **except US and the UK** (expressing concerns related to excessive regulations on AI). **Hence, statement II is not correct.**

Hence, option (a) is correct.

Sources:

- [India, 57 others sign Paris joint statement on inclusive, sustainable AI - The Hindu](#)
- **Drishti IAS source:** [Paris AI Summit 2025](#)

Q56. Consider the following pairs:

- I. International Year of the Woman Farmer: 2026
- II. International Year of Sustainable and Resilient Tourism: 2027
- III. International Year of Peace and Trust: 2025
- IV. International Year of Asteroid Awareness and Planetary Defence: 2029

How many of the pairs given above are correctly matched?

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

Ans: (d)

Explanation:

- The UN General Assembly has declared **2026 as the International Year of the Woman Farmer** to highlight the crucial role of women farmers in food security, nutrition, and poverty eradication, and to address the challenges they face. **Hence, pair I is correctly matched.**
- The UN General Assembly declared **2027 the International Year of Sustainable and Resilient Tourism** as a means of promoting and accelerating sustainable development. **Hence, pair II is correctly matched.**
- The UN General Assembly has declared **2025 as the International Year of Peace and Trust** that calls on the international community to resolve conflicts through inclusive dialogue and negotiation. **Hence, pair III is correctly matched.**
- The United Nations proclaimed **2029 as the International Year of Asteroid Awareness and Planetary Defence** to highlight the importance of learning about these celestial bodies and finding ways to protect the Earth from a catastrophic event. **Hence, pair IV is correctly matched.**

Hence, option (d) is correct.

Sources:

- [Family Farming Knowledge Platform](#)
- [UN General Assembly declares 2027 the International Year of Sustainable and Resilient Tourism](#)
- [2025: International Year of Glaciers, Peace, Quantum science and Cooperatives](#)

▪ [The International Year of Asteroid Awareness and Planetary Defence](#)

Q57. Consider the following statements with regard to BRICS:

- I. The 16th BRICS Summit was held under the Chairship of Russia in Kazan.
- II. Indonesia has become a full member of BRICS.
- III. The theme of the 16th BRICS Summit was Strengthening Multiculturalism for Just Global Development and Security.

Which of the statements given above is/are correct?

- (a) I and II
- (b) II and III
- (c) I and III
- (d) I only

Ans: (a)

Explanation:

- 16th BRICS Summit:
 - The 16th BRICS Summit was held under the **Chairship of Russia in Kazan in October, 2024**. The **Kazan Declaration 2024** voiced concern over the **Gaza humanitarian crisis, criticized unilateral Western sanctions**, proposed a **BRICS Grain Exchange**, and urged greater **financial integration** among members. **Hence, statement I is correct.**
 - **On January 6th, 2025 the Ministry of Foreign Affairs of Brazil (the country that holds the chairmanship in the BRICS for the year 2025) declared that Indonesia has joined the BRICS bloc as a full-fledged member. Hence, statement II is correct.**
 - The **theme** of the 16th BRICS Summit was **Strengthening Multilateralism for Just Global Development and Security** highlighting the bloc's commitment to tackling global challenges. **Hence, statement III is not correct.**

Hence, option (a) is correct.

Sources:

- [Prime Minister participates in the 16th BRICS Summit.](#)
- [Indonesia Becomes a Full-Fledged BRICS Member](#)
- **Drishti IAS source:**
 - [16th BRICS Summit & India-China Border Agreement](#)
 - [Indonesia Joined BRICS](#)

Q58. Consider the following statements about Lokpal:

- I. The power of Lokpal applies to public servants of India, but not to the Indian public servants posted outside India.
- II. The Chairperson or a Member shall not be a Member of the Parliament or a Member of the legislature of any State or Union Territory and only the Chief Justice of India, whether incumbent or retired, has to be its Chairperson.
- III. The Chairperson or a Member shall not be a person of less than forty-five years of age on the date of

assuming office as the Chairperson or Member, as the case may be.

IV. Lokpal cannot inquire into the allegations of corruption against a sitting Prime Minister of India.

Which of the statements given above is/are correct?

- (a) III only
- (b) II and III
- (c) I and IV
- (d) None of the above statements is correct

Ans: (a)

Explanation:

The **salient features** of the **Lokpal and Lokayuktas Act, 2013** are as follows:

- **Jurisdiction:** Lokpal's jurisdiction will cover **all categories of public servants**, including **Group A, Group B, Group C, and Group D officers and employees** of Government.
 - It extends to the **whole of India** and applies to **public servants both within and outside the country. Hence, statement I is not correct.**
- **Composition:** The **Lokpal** consists of:
 - **One Chairperson** who must be a **former Chief Justice of India, Supreme Court Judge**, or an **eminent person** meeting specific eligibility criteria. **Hence, statement II is not correct.**
 - **Up to 8 Members**, with **50% as Judicial Members** (Judges) and **at least 50% from SCs, STs, OBCs, minorities, and women.**
 - **Judicial Members:** Must be a **former Supreme Court Judge** or a **former Chief Justice of a High Court.**
 - **Non-Judicial Members:** A **non-judicial Member** must have **impeccable integrity** and at least **25 years of expertise** in areas like **anti-corruption, public administration, vigilance, finance, law, or management.**
- The **Chairperson or a Member** shall **not** be a **Member of the Parliament or a Member of any State or Union Territory. Disqualifications:** The **Chairperson or a Member** shall not be a person of **less than forty-five years of age**, on the date of assuming office as the Chairperson or Member, as the case may be. **Hence, statement III is correct.**
- **Inclusion of Prime Minister:** The **Lokpal** can investigate **allegations of corruption** made in a complaint against the **Prime Minister. Hence, statement IV is not correct.** However, there are some exceptions.
- The Lokpal **cannot inquire into allegations** against the Prime Minister if:
 - The matter relates to **international relations, security (external or internal), public order, atomic energy, or space,**
 - **Unless the full bench** of the Lokpal (Chairperson and all Members) decides to take up the case and **at least two-thirds** of the Members approve the inquiry.

Hence, option (a) is correct.

Sources:

- [THE LOKPAL AND LOKAYUKTAS ACT, 2013](#)
- Drishti IAS source: [Lokpal Foundation Day](#)

Q59. Consider the following statements in respect of the first Kho-Kho World Cup:

I. The event was held in Delhi, India.

II. Indian men beat Nepal with a score of 78-40 in the final to become the World Champion in the men category.

III. Indian women beat Nepal with a score of 54—36 in the final to become the World Champion in women category.

Which of the statements above is/are correct?

- (a) I only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Ans: (a)

Explanation:

- The **first Kho-Kho World Cup** event was held at **Indira Gandhi Indoor Stadium in New Delhi** with **India winning** the Kho Kho World Cup 2025 titles in both **men and women category**. Hence, **statement I is correct**.
- The **Indian men's** kho kho team defeated Nepal **54-36** in the final, while the **Indian women's** team beat Nepal **78-40**. Hence, **statements II and III are not correct**.

Hence, option (a) is correct.

Sources:

- [Kho Kho World Cup 2025](#)
- [First-ever Kho Kho World Cup 2025 draws historic global participation with 24 countries](#)
- **Drishti IAS Link:** [India Wins Inaugural Kho Kho World Cup 2025](#)

Q60. Consider the following statements:

I. In the finals of the 45th Chess Olympiad held in 2024, Gukesh Dommaraju became the world's youngest winner after defeating the Russian player Ian Nepomniachtchi.

II. Abhimanyu Mishra, an American chess player, holds the record of becoming world's youngest ever Grandmaster.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Ans: (b)

Explanation:

- **Gukesh Dommaraju** became the **youngest-ever World Chess Champion** in December 2024, after defeating **Ding Liren of China** in the **World Chess Championship** match held in **Singapore**. Hence, **statement I is not correct**.

- Indian-origin American **Abhimanyu Mishra** is the **youngest-ever** chess Grandmaster in the world. He achieved this feat when he was **12 years, 4 months and 25 days old in the year 2021. Hence, statement II is correct.**

Hence, option (b) is correct.

Sources:

- [Erdogmus Becomes World's Youngest Grandmaster At 12 - Chess.com.](#)
- [World Chess Championship: D Gukesh scripts historic win vs China's Ding Liren, becomes youngest-ever champ](#)
- **Drishti IAS source:** [Gukesh Won 2024 FIDE World Chess Championship](#)

Simplify Doubts, Strengthen Concepts

IAS GS Foundation Course 2025

UPSC Prelims + Mains | Live Online Batch

AI Summary
Instant Summary of the Lecture

AI Quiz
Take AI Generated Quiz Based on the Lecture

Ask Me a Question
Instant AI - Powered Answer

Admissions Open
87501 87501

Q61. Consider the following statements:

Statement I: Some rare earth elements are used in the manufacture of flat television screens and computer monitors.

Statement II: Some rare earth elements have phosphorescent properties.

Which one of the following is correct?

- (a) Both are correct and II explains I
- (b) Both are correct but II does not explain I
- (c) Only I is correct
- (d) Only II is correct

Answer: (a)

Explanation:

- They are a set of seventeen metallic elements. These include the fifteen lanthanides on the [periodic table](#) in addition to **scandium and yttrium** that show similar physical and chemical properties to the lanthanides. These elements are important components in over 200 products, spanning applications in consumer electronics, electric vehicles, defence systems. **Hence, statement I is correct.**
- Rare earth elements such as europium and terbium are widely used in color displays of TVs and monitors because of their phosphorescent properties (they glow when exposed to radiation). **Hence, statement II is correct.**

Hence, option A is the correct answer.

Sources:

- Drishti IAS source: [Rare Earth Elements](#)
 - [Rare Earth Metals](#)

Q62. Consider the following statements:

- I. Indian Railways have prepared a National Rail Plan (NRP) to create a future-ready railway system by 2028.
- II. 'Kavach' is an Automatic Train Protection (ATP) system developed in collaboration with Germany.
- III. 'Kavach' system consists of RFID tags fitted on tracks in station sections.

Which of the above statements given above are **not** correct?

- (a) I and II only
(b) II and III only
(c) I and III only
(d) I, II and III

Answer: (d)

Explanation:

- The **National Rail Plan (NRP) 2020** envisions creating a '**future-ready**' railway system by **2030**, not by 2028. The plan aims to develop strategies based on operational capacities and commercial policy initiatives to increase the modal share of the Railways in freight to 45%. It also focuses on reducing transit time of freight substantially by increasing the average speed of freight trains to 50 kmph. **Hence, statement 1 is not correct.**
- **Kavach is a cab signaling train control system with anti-collision features developed by the [Research Design and Standards Organisation \(RDSO\)](#)** in association with three Indian vendors.
 - The **German and Japanese companies** have been permitted to deploy Kavach on Indian Railways, the development of the system was carried out domestically without foreign collaboration. It has been adopted as our **National Automatic Train Protection (ATP) System. Hence, statement 2 is not correct.**
 - **Automatic Train Protection (ATP) System** is a train safety system designed to ensure that a train's speed remains within the limits set by the signalling system. It continuously monitors the train's speed and automatically enforces compliance with permitted speed restrictions. If the train exceeds the allowed speed or fails to respond to specific signal aspects, ATP promptly activates the emergency brakes to bring the train to a stop.
- **Kavach was adopted as National ATP system in July 2020:** Implementation of Kavach System involves following Key Activities:
 - **Installation of Station Kavach at each and every station, block section.**
 - **Installation of RFID Tags throughout the track length (not only tracks in station sections). Hence, statement 3 is not correct.**
 - Installation of telecom Towers throughout the section.
 - Laying of Optical Fibre Cable along the track.

Hence, option D is correct

Sources:

- [Kavach: The Shield of Safety](#)
- [Kavach: India's Cutting-Edge Automatic Train Protection System Reaches New Milestone with Version 4.0](#)

Q63. Consider the following space missions:

- I. Axiom-4
- II. SpaDeX
- III. Gaganyaan

How many of the space missions given above encourage and support microgravity research?

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

Answer: (c)

Explanation:

- Microgravity research, often conducted in space or simulated on Earth, studies the effects of reduced or absent gravity on various phenomena. It allows scientists to investigate fundamental processes, develop new materials, and explore how the human body adapts to spaceflight.
 - **Axiom Mission 4 (Ax-4):** It is a private spaceflight to the ISS operated by Axiom Space (US-based space-infrastructure development company), using the SpaceX Crew Dragon spacecraft. This mission **explicitly supports microgravity research**, focusing on areas like the impact of microgravity on edible microalgae and the growth of salad seeds in space.
 - **SpaDeX:** SpaDeX mission is a cost-effective **technology demonstrator mission for the demonstration of in-space docking using two small spacecraft launched by PSLV**.
 - **ISRO's SpaDeX (Space Docking Experiment)** mission actively **encourages and supports microgravity research**. While its primary objective is to develop and demonstrate in-space rendezvous and docking technologies, it also incorporates several microgravity experiments.
 - **Gaganyaan:** The Gaganyaan Mission is India's ongoing project to send a 3-day manned mission to the Low Earth Orbit (LEO) of 400 km with a crew of 3 members and bring them safely back to Earth.
 - **Gaganyaan mission is designed to support Indian scientists in conducting microgravity experiments** through collaborations with other space agencies. It is intended to build upon the knowledge gained from missions like Axiom-4.

Hence, option (c) is correct

Sources:

- NASA on Axiom and SpaceX: [NASA Missions Database](#)
- [SpaDeX Mission](#)
- Drishti IAS source: [ISRO's SpaDeX](#)
 - [Gaganyaan Astronauts Selected for Axiom-4 Mission](#)

Q64. With reference to India's defence, consider the following pairs:

Aircraft Type	Description
I. Dornier-228	Maritime patrol aircraft
II. IL-76	Supersonic combat aircraft
III. C-17 Globemaster III	Military transport aircraft

How many of the pairs are correctly matched?

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

Answer: (b)

Explanation:

- **Dornier-228** –Dornier 228 is a twin engine turboprop, highly versatile multi-mission maritime patrol aircraft manufactured by M/s HAL for the Indian Coast Guard. The aircraft is lightweight with wide range of operating speeds and fuel efficient uniqueness. This high winged aircraft is operated by ICG in two variant in 228 – 100 and 228 – 200 series.
 - The Dornier 228 has quick role changing capability like, maritime patrol & surveillance, marine pollution contingency, search & rescue and medical evacuation. **Hence, pair I is correctly matched.**
- **IL-76:** It is a **transport aircraft**, not supersonic combat. It is a **subsonic**, four-engine, heavy-lift military transport aircraft, not designed for combat or speed performance like fighter jets. It is frequently used by the Indian Airforce for transporting strategic cargo, aerial refuelling etc. **Hence, pair II is not correctly matched.**
- **C-17:** C-17 Globemaster III is a premier transporter for military, humanitarian and peacekeeping missions. It is classified as a **strategic airlift aircraft**, designed to carry heavy and outsized military cargo over **long intercontinental distances**. It can also operate in **tactical environments**, including short or austere runways—making it versatile for both **strategic and tactical roles**. **Hence, pair III is correctly matched.**

Hence, option B is correct.

Sources:

- [Air Craft - ICG](#)
- [IAF's IL-76 Aircraft Lands in Manila Amid Speculation of BrahMos Missile Delivery to the Philippines - Indian Defence Research Wing](#)
- **Drishti IAS source:** [Hindustan-228 Civil Aircraft](#).

Q65. Artificial way of causing rainfall to reduce air pollution makes use of

- (a) Silver iodide and potassium iodide
- (b) Silver nitrate and potassium iodide
- (c) Silver iodide and potassium nitrate
- (d) Silver nitrate and potassium chloride

Answer: (a)

Explanation:

- Artificial rain refers to the process of inducing precipitation through cloud seeding, a weather modification technique. Cloud seeding, a weather modification technique, enhances precipitation by dispersing chemicals leading to rainfall.
 - It is primarily used to **enhance rainfall**, combat **drought conditions**, and **reduce air pollution**. **The method involves dispersing chemicals like silver iodide, potassium iodide, and dry ice into clouds to encourage the formation of raindrops using aircraft or helicopters.**
 - These chemicals act as nuclei around which water vapour condenses to form larger droplets, eventually leading to rainfall.

- The success of cloud seeding depends on the presence of sufficient moisture and appropriate atmospheric conditions.

Hence, option A is correct.

Sources:

- [Combating air pollution with artificial rain: Cloud seeding explained | India News - Business Standard](#)
- Drishti IAS source: [Cloud Seeding to Reduce Air Pollution](#)

Q66. Consider the following statements with regard to pardoning power of the President of India:

- I. The exercise of this power by the President can be subjected to limited judicial review.
- II. The President can exercise this power without the advice of the Central Government.

Which of the statements given above is/are correct?

- (a) Only I
- (b) Only II
- (c) Both I and II
- (d) Neither I nor II

Answer: (a)

Explanation:

- The President of India is the constitutional head of the country. The **Constitution of India, 1950 (COI)** empowers the President with legislative, executive and judicial powers. Article 72 of the COI deals with the judicial power of the President also termed as pardoning power of the President.
 - The President of India's pardoning power under **Article 72** of the Constitution is not absolute and can be subjected to judicial review in specific cases. As per *Epuru Sudhakar v. Andhra Pradesh*, the President's power is subject to judicial review if exercised arbitrarily. **Hence, statement I is correct.**
- **According to Article 74 of Indian Constitution** the President **cannot exercise his power of pardon** independent of the government. The article states, there shall be a Council of Ministers with the Prime Minister at the head to aid and advise the President who shall, in the exercise of his functions, act in accordance with such advice. **Hence, statement II is not correct.**

Hence, option (a) is correct.

Sources:

- M Laxmikanth Indian Polity Book.(Pg. No 198, 7th edition)

Q67. Consider the following statements:

- I. On the dissolution of the House of the People, the Speaker shall not vacate his/her office until immediately before the first meeting of the House of the People after the dissolution.

II. According to the provisions of the Constitution of India, a Member of the House of the People on being elected as Speaker shall resign from his/her political party immediately.

III. The Speaker of the House of the People may be removed from his/her office by a resolution of the House of the People passed by a majority of all the then Members of the House, provided that no resolution shall be moved unless at least fourteen days' notice has been given.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (c)

Explanation:

- Article **94** of the Constitution states that the Speaker **does not vacate office upon dissolution** of the Lok Sabha and continues until a new Speaker is elected. **Hence, statement I is correct.**
- The Constitution **does not mandate resignation** from a political party on being elected as Speaker. Though by convention the Speaker is expected to act impartially, **formal resignation is not required. Hence, statement II is not correct.**
- Article **94(c)** and **Rule 11 of the Rules of Procedure and Conduct of Business** in Lok Sabha allow removal of the Speaker by a **majority of all the then members of the Lok Sabha (i.e; effective majority)**. Such resolution can be moved only after giving **14 days advance notice.. Hence, statement III is correct.**

Hence, option(c) is correct.

Sources:

- Laxmikant 7 edition (Pg. 229)
- Constitution of India - Article 94
- Lok Sabha Rules of Procedure
- [Vacation and resignation of, and removal from, the offices of Speaker and Deputy Speaker](#)
- Drishti IAS source: [Role of the Speaker](#)

Q68. Consider the following statements:

I. If any question arises as to whether a Member of the House of the People has become subject to disqualification under the 10th Schedule, the President's decision in accordance with the opinion of the Council of Union Ministers shall be final.

II. There is no mention of the word 'political party' in the Constitution of India.

Which of the statements given above is/are correct?

- (a) I only

- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Answer: (d)

Explanation:

- The anti-defection law punishes individual Members of Parliament (MPs)/MLAs for leaving one party for another. Parliament added it to the Constitution as the **Tenth Schedule** in 1985. Its purpose was to bring stability to governments by discouraging legislators from changing parties.
 - The Tenth Schedule - popularly known as the Anti-Defection Act - was included in the Constitution via the 52nd Amendment Act, 1985 and sets the provisions for disqualification of elected members on the grounds of defection to another political party.
 - The decision on questions as to disqualification on ground of defection are referred to the Chairman or the Speaker of such House, which is subject to '**Judicial review**'. **Hence, statement I is not correct.**
 - The term '**political party**' is **explicitly mentioned** in the **Tenth Schedule**, which deals with anti-defection. **Hence, statement II is not correct.**

Hence, option (d) is correct answer.

Sources:

- [Constitution of India](#)
- [PRS Legislative Research on Anti-Defection Law](#)
- [TENTH SCHEDULE](#)

Q69. Consider the following statements:

Statement I: In India, State Governments have no power for making rules for grant of concessions in respect of extraction of minor minerals even though such minerals are located in their territories.

Statement II: In India, the Central Government has the power to notify minor minerals under the relevant law.

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

- (a) Both Statement I and II are correct but statement II explains Statement I
- (b) Both Statement I and II are correct and statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Answer: (d)

Explanation:

- States have the power to make rules for minor minerals under Section 15 of the Mines and Minerals (Development and Regulation) Act, 1957. According to the section the State Government may, by notification in the Official Gazette, make rules for, regulating the grant of 3 [quarry leases, mining leases or other mineral concessions] in respect of minor minerals and for purposes connected therewith. **Hence, statement I is not correct.**
- The Central Government has the power to notify which minerals are classified as minor minerals under Section 3(e) of the same Act. **Hence, statement II is correct.**
- **Hence, option (d) is the correct answer.**

Sources:

- [THE MINES AND MINERALS \(DEVELOPMENT AND REGULATION\) ACT, 1957 | India Code](#)
- [Ministry of Mines](#)
- [GSI](#)
- [Part-I: CENTRAL LAW RELATING TO MINOR MINERALS - \(i\) - Definition](#)

Q70. Which organization has enacted the Nature Restoration Law (NRL) to tackle climate change and biodiversity loss?

- (a) The European Union
- (b) The World Bank
- (c) The Organisation of Economic Cooperation and Development
- (d) FAO

Answer: (a)

Explanation:

- The Nature Restoration Law (NRL) was enacted by the European Union (EU). This law is a key element of the EU's Biodiversity Strategy and aims to restore the health of Europe's ecosystems. The EU's Environment Council adopted the law on June 17, 2024.
- The **Nature Restoration Regulation** is the first continent-wide, comprehensive law of its kind. It is a key element of the **EU Biodiversity Strategy**, which sets binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.
- **Hence, option (a) is correct.**

Sources:

- [The EU adopts its new Nature Restoration Law - News | IUCN](#)
- ["Part-I: CENTRAL LAW RELATING TO MINOR MINERALS - \(i\) - Definition"](#)

Drishhti IAS

UPSC Mains Test Series - 2025

Package - II and III

English and Hindi Medium | Online and Offline Mode

Package - II (12 FLT's)

Starting from | **1st June, 2025**

Package - III (8 FLT's)

Starting from | **29th June, 2025**

Q71. Suppose the revenue expenditure is 80,000 crores and the revenue receipts of the Government are 60,000 crores. The Government budget also shows borrowings of 10,000 crores and interest payments of 6,000 crores. Which of the following statements are correct?

- I. Revenue deficit is 20,000 crores.

II. Fiscal deficit is 10,000 crores.

III. Primary deficit is 4,000 crores.

Select the correct answer using the code given below.

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Ans: (d)

Explanation:

- **Revenue Deficit:**
Revenue Deficit=Revenue Expenditure–Revenue Receipts
=80,000 crores–60,000 crores=20,000 crores
So, Statement I is correct.
- **Fiscal Deficit:**
Fiscal Deficit=Borrowings=10,000 crores
So, Statement II is correct.
- **Primary Deficit:**
Primary Deficit=Fiscal Deficit–Interest Payments
=10,000 crores–6,000 crores=4,000 crores
So, Statement III is correct.

Hence, option (d) is correct.

Sources:

- [NCERT](#)

Q72. India is one of the founding members of the International North-South Transport Corridor (INSTC), a multimodal transportation corridor, which will connect

- (a) India to Central Asia to Europe via Iran
- (b) India to Central Asia via China
- (c) India to South-East Asia through Bangladesh and Myanmar
- (d) India to Europe through Azerbaijan

Ans: (a)

Explanation:

- The **International North-South Transport Corridor (INSTC)** is a **7,200-kilometer-long** multimodal transportation network that connects **India with Iran, Central Asia, Russia, and Europe**. The INSTC is designed to facilitate the movement of goods from India to these regions using a **combination of sea, rail, and road routes**.
- The INSTC starts from **Mumbai (India)** and reaches the **Iranian ports of Chabahar or Bandar Abbas by sea**. From there, goods move overland through Iran, then across the **Caspian Sea to Russia**, and further into **Europe**. The corridor also provides access to **Central Asian countries** such as **Kazakhstan, Turkmenistan, and Azerbaijan**.

- The Chabahar Port in Iran is a critical component of the INSTC, providing India with **direct access to Afghanistan and Central Asia, bypassing Pakistan.**

Hence, option (a) is correct.

Sources:

- [Workshop conducted on 'Linking Chabahar Port with INSTC'](#)
- **Drishti IAS Source:** [Rasht-Astara Railway and INSTC](#)

Q73. Consider the following statements:

Statement I: Of the two major ethanol producers in the world, i.e., Brazil and the United States of America, the former produces more ethanol than the latter.

Statement II: Unlike in the United States of America where corn is the principal feedstock for ethanol production, sugarcane is the principal feedstock for ethanol production in Brazil

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 explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

Ans: (d)

Explanation:

- The **United States is the world's largest producer of ethanol**, having produced over 15 billion gallons in 2021 and 2022. Together, the United States and Brazil produce 80% of the world's ethanol. **Hence, statement I is not correct.**
- The vast majority of **U.S. ethanol is produced from corn**, while **Brazil primarily uses sugarcane. Hence, statement II is correct.**

Hence, option (d) is correct.

Sources:

- [Brazil offers to share ethanol production tech with India to resolve sugar-related dispute at WTO | World News - The Indian Express](#)

Q74. The World Bank warned that India could become one of the first places where wet-bulb temperatures routinely exceed 35 °C. Which of the following statements best reflect(s) the implication of the above-said report?

- I. Peninsular India will most likely suffer from flooding, tropical cyclones and droughts.
- II. The survival of animals including humans will be affected as shedding of their body heat through perspiration becomes difficult.

Select the correct answer using the code given below.

- (a) I only
- (b) II only

(c) Both I and II

(d) Neither I nor II

Ans: (c)

Explanation:

- The World Bank's warning specifically addresses wet-bulb temperatures exceeding 35°C, which pertains to lethal heat stress caused by a combination of high temperature and humidity. **So, statement I is correct.**
- At a wet-bulb temperature of 35°C, the human body (and animals) cannot cool itself through sweating, leading to heatstroke, organ failure, and death within hours. This is the core implication of the World Bank's warning. **So, statement II is correct.**

Hence, option (c) is correct.

Sources:

- [Record heat waves push India closer to limit of human survival, ET HealthWorld](#)

Q75. A country's fiscal deficit stands at 50,000 crores. It is receiving 10,000 crores through non-debt creating capital receipts. The country's interest liabilities are 1,500 crores. What is the gross primary deficit?

(a) 48,500 crores

(b) 51,500 crores

(c) 58,500 crores

(d) None of the above

Ans: (a)

Explanation:

- $\text{Primary Deficit} = \text{Fiscal Deficit} - \text{Interest Payments}$
 - Fiscal Deficit = Rs 50,000 crores
 - Interest Payments = Rs 1,500 crores.
 - $\text{Primary Deficit} = \text{Rs } 50,000 \text{ crores} - \text{Rs } 1,500 \text{ crores} = \text{Rs } 48,500 \text{ crores.}$

Hence, option (a) is correct.

Sources:

- [NCERT](#)

Q76. Which of the following statements with regard to recommendations of the 15th Finance Commission of India are correct?

I. It has recommended grants of Rs 4,800 crores from the year 2022-23 to the year 2025-26 for incentivizing States to enhance educational outcomes.

II. 45 % of the net proceeds of Union taxes are to be shared with States.

III. 45,000 crores are to be kept as performance-based incentive for all States for carrying out agricultural reforms.

IV. It reintroduced tax effort criteria to reward fiscal performance.

Select the correct answer using the code given below.

- (a) I, II and III
- (b) I, II and IV
- (c) I, III and IV
- (d) II, III and IV

Ans: (c)

Explanation:

- The 15th Finance Commission (XVFC) **recommended a total grant of Rs 4,800 crores** for the period 2022-23 to 2025-26 to incentivize States to **enhance educational outcomes**, especially in school education. This grant is meant to **reward States that show improvement** in learning outcomes and governance in education. **So, statement I is correct.**
- The XVFC **recommended devolution of 41%** of the net proceeds of Union taxes to the States **for the period 2021-2026**, continuing the level from the 14th Finance Commission **but reducing from 42%** recommended initially to accommodate the funding requirements of the newly formed Union Territories (J&K and Ladakh). **So, statement II is not correct.**
- The XVFC recommended a **performance-based incentive of Rs 45,000 crores** to be given to States that carry out specific **agricultural reforms**. **So, statement III is correct.**
- The XVFC **reintroduced the 'tax effort' criterion** (previously dropped) in its **horizontal devolution formula** to encourage and reward better fiscal performance by States. It assigned a **weight of 2.5%** to this criterion. It is calculated as the ratio of a state's tax-to-GSDP, rewarding those who generate more revenue. **So, statement IV is correct.**

Hence, option (c) is correct.

Sources:

- [The Report of the Fifteenth Finance Commission](#)
- Drishti IAS source: [15th Finance Commission Recommendations: Resource Allocation](#)

Q77. Consider the following statements in respect of the International Bank for Reconstruction and Development (IBRD):

- I. It provides loans and guarantees to middle income countries.
- II. It works single-handedly to help developing countries to reduce poverty.
- III. It was established to help Europe rebuild after World War II.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Ans: (c)

Explanation:

- The **International Bank for Reconstruction and Development (IBRD)** is the main lending arm of the **World Bank Group** and primarily provides loans and guarantees to **middle-income and creditworthy low-income countries**. So, **statement I is correct**.
- The IBRD is part of the World Bank Group, which includes **several institutions** including:
 - **International Bank for Reconstruction and Development (IBRD)**
 - **International Development Association (IDA)**
 - **International Finance Corporation (IFC)**
 - **Multilateral Guarantee Agency (MIGA)**
 - **International Centre for the Settlement of Investment Disputes (ICSID)**. They work together, not singlehandedly. So, **statement II is not correct**.
- The IBRD was established in **1944** with the initial purpose of financing the reconstruction of European countries devastated by World War II. So, **statement III is correct**.

Hence, option (c) is correct.

Sources:

- [International Bank for Reconstruction and Development](#)
- Drishti IAS source: [World Bank Group](#)

Q78. Consider the following statements in respect of RTGS and NEFT:

- I. In RTGS, the settlement time is instantaneous while in case of NEFT, it takes some time to settle payments.
- II. In RTGS, the customer is charged for inward transactions while that is not the case for NEFT.
- III. Operating hours for RTGS are restricted on certain days while this is not true for NEFT.

Which of the statements given above is/are correct?

- (a) I only
- (b) I and II
- (b) I and III
- (d) III only

Ans: (a)

Explanation:

- **RTGS (Real Time Gross Settlement)** processes transactions **individually** and in **real time**, meaning the transfer is **settled instantly** as soon as it is initiated.
 - **NEFT (National Electronic Funds Transfer)** processes transactions in **half-hourly batches** (deferred net settlement), so there is a delay before the funds are credited to the beneficiary's account. So, **statement I is correct**.
- As per RBI guidelines, **no charges are levied for inward transactions** (receiving funds) in both **RTGS and NEFT**. So, **statement II is not correct**.
- Both RTGS and NEFT are now available **24x7, 365 days a year for online transactions** as per the latest RBI guidelines. So, **statement III is not correct**.
 - Earlier, RTGS had restricted hours, but **since December 2020**, it operates round the clock. NEFT has also been made **24x7**.

Hence, option (a) is correct.

Sources:

- [Removal of charges on RTGS & NEFT](#)
- [Round-the-clock RTGS facility from midnight | Business News - The Indian Express](#)
- [RTGS service charges for members and customers - Rationalisation](#)
- Drishti IAS source: [National Electronic Fund Transfer \(NEFT\) - Drishti IAS](#)

Q79. Consider the following countries:

I. United Arab Emirates

II. France

III. Germany

IV. Singapore

V. Bangladesh

How many countries amongst the above are there other than India where international merchant payments are accepted under UPI?

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

Ans: (b)

Explanation:

The **Unified Payments Interface (UPI)**, India's **real-time payment** system, has expanded internationally, enabling Indian travellers to make **merchant payments abroad**. The **status of UPI** for each country is as follows:

- **United Arab Emirates (UAE):** UPI is accepted via partnerships with **UAE's NeoPay and Mashreq Bank**.
- **France:** UPI payments are accepted at prominent locations like the **Eiffel Tower**. Launched in February 2024.
- **Germany:** Not currently part of UPI's international network. No official agreements or partnerships exist as of May 2025.
- **Singapore:** Linked with **Singapore's PayNow system**. Accepted at 30,000+ merchants via apps like **Google Pay and PhonePe**.
- **Bangladesh:** No UPI integration. Cross-border transactions with Bangladesh use traditional methods, not UPI.

Hence, option (b) is correct.

Sources:

- [DFS drives expansion of digital payments in India and abroad](#)
- Drishti IAS Source: [UPI Services in Sri Lanka and Mauritius - Drishti IAS](#)

Q80. Consider the following statements about PM Surya Ghar Muft Bijli Yojana:

I. It targets installation of one crore solar rooftop panels in the residential sector.

II. The Ministry of New and Renewable Energy aims to impart training on installation, operation, maintenance and repairs of solar_rooftop systems at grassroot levels.

III. It aims to create more than three lakhs skilled manpower through fresh skilling, and upskilling, under scheme component of capacity building.

Which of the statements given above are correct?

- (a) I and II only
- (b) I and III only
- (c) II and III only
- (d) I, II and III

Ans: (d)

Explanation:

- The **PM Surya Ghar: Muft Bijli Yojana** aims to install solar rooftop systems in **one crore households by March 2027**. Hence, **statement I is correct**.
- The scheme guidelines and official documents state that the Ministry of New and Renewable Energy (MNRE) will conduct **training at the grassroots for installation, operation, maintenance, and repair** of solar rooftop systems. Hence, **statement II is correct**.
- The scheme has set a **target** to create over **3 lakh skilled personnel** through fresh **skilling and upskilling initiatives**. This includes training **at least 1 lakh individuals** as Solar PV Technicians, contributing to the development of a **skilled workforce in the renewable energy sector**. Hence, **statement III is correct**.

Hence, option (d) is correct.

Sources:

- [PM Modi announces 'PM Surya Ghar: Muft Bijli Yojana' to boost solar power | India News - The Indian Express](#)
- [PM Surya Ghar: Muft Bijli Yojana Turns One](#)
- [Drishti IAS source: PM Surya Ghar—Muft Bijli Yojana](#)

Drishti IAS

UPSC Mains Test Series - 2025

Package - II and III

English and Hindi Medium | Online and Offline Mode

Package - II (12 FLT's)

Starting from | **1st June, 2025**

Package - III (8 FLT's)

Starting from | **29th June, 2025**

Q81. With reference to the Indian polity, consider the following statements:

- I. An Ordinance can amend any Central Act.
- II. An Ordinance can abridge a Fundamental Right.

III. An Ordinance can come into effect from a back date.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (c)

Explanation:

- **Article 123** of the Constitution empowers the President to promulgate ordinances during the **recess of Parliament**. The President can issue an ordinance only when either one or both Houses of Parliament are not in session, as legislation requires the approval of both Houses.
- These ordinances have the **same force and effect as an act of Parliament**. Hence, the President can issue an ordinance **to amend or repeal any existing Central or State Act**. **Hence, statement I is correct.**
- An ordinance, like any other legislation, **can be retrospective**, that is, it may come into force from a back date. **Example:** The Enemy Property (Amendment and Validation) Ordinance, 2016 was promulgated on January 7, 2016, to amend the Enemy Property Act, 1968. The 2016 ordinance was later replaced by the Enemy Property (Amendment and Validation) Act, 2017, which retained the retrospective elements. **Hence, statement III is correct.**
- **However, an ordinance, just like any ordinary Act of Parliament, is bound by constitutional limitations and cannot violate or take away Fundamental Rights** guaranteed under the Constitution. **Hence, statement II is NOT correct.**
 - Moreover, ordinances are **specifically covered under the definition of law** under Article 13.

Hence, option (c) is correct.

Sources:

- **M Laxmikanth 7th edition page 225**
- **Drishti IAS source:** [Promulgation and Re-promulgation of Ordinances](#)

Q82. Consider the following pairs:

State	Description
I. Arunachal Pradesh	The capital is named after a fort, and the State has two National Parks
II. Nagaland	The State came into existence on the basis of a Constitutional Amendment Act
III. Tripura	Initially a Part 'C' State, it became a centrally administered territory in 1956, and later attained full statehood

How many of the above pairs are correctly matched?

- (a) Only one
- (b) Only two
- (c) All the three

(d) None

Answer: (c)

Explanation:

- Arunachal Pradesh's capital is **Itanagar**, which is named after the **Ita Fort**, meaning fort of bricks, constructed in the 14th century A.D.
 - Also, the state is home to **two National Parks: Namdapha National Park and Mouling National Park. Hence, pair I is correctly matched.**
- **Nagaland** came into existence through the **Constitution (Thirteenth Amendment) Act, 1962**. Article **371A** was inserted to provide special constitutional provisions for Nagaland. **Hence, pair II is correctly matched.**
 - The Act recognized its **unique social, cultural, and administrative features**, including the **non-applicability of parliamentary laws** on certain matters unless approved by the state legislature.
- **Tripura** was a **Part 'C' state** post-merger with the Indian Union in **1949**. Following the **States Reorganisation Act of 1956**, it became a **centrally administered territory**. Later, in **1972**, Tripura became a **full-fledged state. Hence, pair III is correctly matched.**

Hence, option (c) is correct.

Sources:

- [The Constitution \(Thirteenth Amendment\) Act, 1962](#)
- [State Profile - Tripura.](#)
- [National Parks of India](#)
- **Drishti IAS sources:** [Statehood Day of Mizoram and Arunachal Pradesh](#)
 - [Statehood Day for Manipur, Tripura, and Meghalaya](#)
 - [Nagaland Statehood Day](#)

Q83. With reference to India, consider the following bodies:

- I. The Inter-State Council
- II. The National Security Council
- III. The Zonal Councils

How many of the above were established as per the provisions of the Constitution of India?

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

Answer: (a)

Explanation:

- **Article 263 empowers the President to establish an Inter-State Council** if he believes it serves public interest, and he may specify its duties, organisational structure, and procedures to promote Centre-state and inter-state coordination.
- Thus, in pursuance of the above recommendations of the **Sarkaria Commission**, the Janata Dal Government headed by V. P. Singh established the **Inter-State Council in 1990.**

- **The National Security Council (NSC) is not a constitutional body.** It was established in **1999 by the Government of India** through an executive order to advise the Prime Minister on national security and strategic interests.
- **Zonal Councils** were established under the **States Reorganisation Act, 1956**, not through any provision in the Constitution. They are **statutory**, not constitutional bodies.
 - The act divided the country into **five zones** (Northern, Central, Eastern, Western and Southern) and provided a zonal council for each zone.
 - One more zonal council i.e. North-Eastern Council was created by a separate Act of Parliament- the North-Eastern Council Act of 1971.

Hence, option (a) is correct.

Sources:

- Laxmikanth 6th edition page 368, 363
- Drishti IAS sources: [National Security Council](#)
 - [Inter-State Council](#)
 - [Zonal Councils](#)

Q84. Consider the following statements regarding constitutional provisions in India:

- The Constitution of India explicitly mentions situations where the Governor of a State can act in his/her discretion.
- The President of India can, on his/her own, reserve a Bill passed by a State Legislature for consideration, even without it being forwarded by the Governor of the concerned State.

Which of the above statements is/are correct?

- I only
- II only
- Both I and II
- Neither I nor II

Answer: (a)

Explanation:

- The **Constitution explicitly provides discretionary powers** to the Governor under certain circumstances. **Hence, statement I is correct.**
 - For example, under **Article 371A(1)(b)** (Nagaland), **Article 371H(a)** (Arunachal Pradesh), and in matters like **reserving a bill for the President's consideration** (Article 200), the Governor can act in his **individual discretion. Hence, statement I is correct.**
- The **President cannot Suo motu reserve a Bill** passed by a State Legislature. It is **only the Governor** who may **reserve certain types of Bills** for the **consideration of the President** under **Article 200**. The President acts **only after such a reservation** is made by the Governor. **Hence, statement II is NOT correct.**

Hence, option (a) is correct.

Sources:

- [Article 371H in Constitution of India](#)
- [Article 371A: Special provision with respect to the State of Nagaland - Constitution of India](#)
- M Laxmikanth page 417 6th edition

- Drishti IAS sources: [Governor](#)
 - [Governor's Power to decide on Bills: Veto Power](#)

Q85. Consider the following pairs:

Provision in the Constitution of India	Stated under
1. Separation of Judiciary from the Executive in public services of the State	Directive Principles of state Policy
2. Valuing and preserving the rich heritage of our composite culture	Fundamental Duties
3. Prohibition of employment of children below the age of 14 years in factories	Fundamental Rights

How many of the above pairs are correctly matched?

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

Answer: (c)

Explanation:

- Article **50** under the **Part IV, Directive Principles of State Policy** directs the State to **separate the judiciary from the executive** in public services of the State. **Hence, pair I is correctly matched.**
- Article **51A(f)** under the **Part IVA, Fundamental Duties** obligates every citizen to **value and preserve the rich heritage of our composite culture**. **Hence, pair II is correctly matched.**
- Article **24** under **Part III, Fundamental Rights** prohibits the **employment of children below 14 years of age** in factories, mines, or other hazardous employment. **Hence, pair III is correctly matched.**

Hence, option (c) is correct.

Sources:

- Laxmikanth 6th edition page 244, 210, 266
- Drishti IAS source: [Directive Principles of State Policy \(DPSP\)](#).
 - [Fundamental Duties - Drishti IAS](#)
 - [Fundamental Rights \(Part-2\)](#)

Q86. Consider the following statements regarding Scheduled Areas under the Fifth Schedule of the Indian Constitution:

- I. If an area in a State is declared as a Scheduled Area under the Fifth Schedule, the State Government loses its executive power, and a local body assumes total administration of such areas.
- II. The Union Government can take over total administration of such areas under certain circumstances on the recommendation of the Governor.

Which of the above statements is/are correct?

- (a) I only
- (b) II only

- (c) Both I and II
- (d) Neither I nor II

Answer: (d)

Explanation:

- **The Fifth Schedule** of the Constitution deals with the administration and control of scheduled areas and scheduled tribes in any state except the four states of Assam, Meghalaya, Tripura and Mizoram.
 - The president is empowered to declare an area to be a scheduled area.
- With regards to scheduled areas under the Fifth Schedule, **the State Government does not lose its executive power**. However, they are subject to some restrictions. **Hence, statement I is NOT correct.**
 - **The Governor of the State** has special responsibilities and **can direct that certain laws may not apply or may apply with modifications** to Scheduled Areas.
 - The **Centre can also give directions to the states** regarding the administration of such areas.
- The **Union Government does not take over administration** of Scheduled Areas on the recommendation of the Governor. It is the **Governor** who exercises **discretionary powers** regarding administration and law application in these areas, and he may submit **reports to the President**. **Hence, statement II is NOT correctly matched.**
 - However, **the Constitution does not empower the Union Government to directly take over total administration** of Scheduled Areas.

Hence, option (d) is correct.

Sources:

- Laxmikanth 6th edition page 882
- Drishti IAS sources: [Scheduled Areas in India](#)

Q87. With reference to India, consider the following pairs:

Organization	Union Ministry
I. The National Automotive Board	Ministry of Commerce and Industry
II. The Coir Board	Ministry of Heavy Industries
III. The National Centre for Trade Information	Ministry of Micro, Small and Medium Enterprises (MSME)

How many of the above pairs are correctly matched?

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

Answer: (d)

Explanation:

- The National Automotive Board (NAB) was established in 2013 under the **Ministry of Heavy Industries**. It deals with testing, certification, and implementation of initiatives like the **FAME India Scheme**, specifically for the automotive sector. **Hence, pair I is NOT correctly matched.**
- The **Coir Board**, set up in 1954 under the **Coir Industry Act, 1953**, works for the promotion and

development of the coir industry. It functions under the **Ministry of MSME**, as it supports traditional and small-scale industries. **Hence, pair II is NOT correctly matched.**

- The National Centre for Trade Information (**NCTI**) has been established by the **Ministry of Commerce and Industry** to collect, analyse, and disseminate trade data and improve trade-related information services. **Hence, pair III is NOT correctly matched.**
- **Hence, option (d) is correct.**

Sources:

- [Information of National Centre for Trade Information](#)
- [Coir Board - MSME](#)
- [Coir Board](#)
- [National Automotive Board | Ministry of Heavy Industries](#)
- Drishti IAS source: [Indian Coir Industry](#)

Q88. Consider the following subjects under the Constitution of India:

- List I - Union List, in the Seventh Schedule
- Extent of the executive power of a State
- Conditions of the Governor's office

For a constitutional amendment with respect to which of the above, ratification by the legislatures of not less than one-half of the States is required before the Bill is presented to the President for assent?

- I and II only
- II and III only
- I and III only
- I, II and III

Answer: (a)

Explanation:

- As per **Article 368(2)** of the Constitution of India, if any bill seeks to make changes to certain specific provisions related to the federal structure of the Indian polity, it is required to be passed **by a special** majority of the Parliament and **ratified by not less than one-half of the state legislatures** before receiving the assent of the President.
- **These include:**
 - Article 54, Article 55, Article 73, **Article 162** or Article 241
 - **Article 162 includes the extent of the executive power of a State.**
 - Chapter IV of Part V, Chapter V of Part VI, or Chapter I of Part XI
 - **Any of the Lists in the Seventh Schedule**
 - The representation of States in Parliament
 - The provisions of Article 368 itself.
- Conditions of the Governor's office are mentioned under **Article 158 of the Constitution under Chapter II of Part VI** which is not explicitly included in the above list.

Hence, option (a) is correct.

Sources:

- Laxmikanth 6th edition page 278
- [Article 162: Extent of executive power of State - Constitution of India](#)

- [Article 368\(2\) in Constitution of India](#)
- [PART VI THE STATES 1***](#)
- Drishti IAS source: [Procedure of Amendment](#)

Q89. With reference to the Indian polity, consider the following statements:

- I. The Governor is not answerable to any court for the exercise and performance of the powers and duties of his/her office.
- II. No criminal proceedings shall be instituted or continued against the Governor during his/her term of office.
- III. Members of a State Legislature are not liable to any proceedings in any court in respect of anything said or any vote given in the legislature or its committees.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

Answer: (d)

Explanation:

- According to Article **361(1)** of the Constitution, **the Governor is not answerable to any court** for the **exercise and performance of the powers and duties of his office**, or for any act done in the exercise of those powers and duties. **Hence, statement I is correct.**
- Article **361(2)** states that **no criminal proceedings** shall be instituted or continued against the Governor **during their term of office**. Additionally, no arrest or imprisonment can be made against a sitting Governor. **Hence, statement II is correct.**
- **Article 194(2)** provides that **no member of the State Legislature shall be liable to any proceedings in any court for anything said or any vote given** in the Legislature or its committees. This is a **parliamentary privilege** extended to state legislators as well. **Hence, statement III is correct.**

Hence, option (d) is correct.

Sources:

- Laxmikanth 6th edition page 191
- [ARUNACHAL PRADESH AT A GLANCE -2021](#)
- Drishti IAS sources: [SC to Examine Governor's Immunity Governor \(Part - III\)](#)
 - [Parliamentary Privileges and Immunities](#)

Q90. Consider the following activities:

- I. Production of crude oil
- II. Refining, storage, and distribution of petroleum
- III. Marketing and sale of petroleum products
- IV. Production of natural gas

How many of the above activities are regulated by the Petroleum and Natural Gas Regulatory Board (PNGRB) in India?

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

Answer: (b)

Explanation:

- **Production of crude oil - Not regulated by PNGRB**
 - The production of crude oil is explicitly excluded from the regulatory purview of PNGRB. This activity falls **under the jurisdiction of the Ministry of Petroleum and Natural Gas** and is overseen by entities like the Directorate General of Hydrocarbons (DGH).
- **Refining, storage, and distribution of petroleum - Regulated by PNGRB**
 - PNGRB is empowered to regulate the refining, processing, storage, transportation, distribution, marketing, and sale of petroleum and petroleum products.
- **Marketing and sale of petroleum products - Regulated by PNGRB**
 - The marketing and sale of petroleum products are within the regulatory scope of PNGRB, ensuring fair trade practices and consumer protection.
- **Production of natural gas - Not regulated by PNGRB**
 - Similar to crude oil, the production of natural gas is excluded from PNGRB's regulatory domain. This activity is managed by the Ministry of Petroleum and Natural Gas and the Directorate General of Hydrocarbons (DGH).

Hence, option (b) is correct.

Sources:

- [PNGRB Act - Petroleum and Natural Gas Regulatory Board](#)
- [PNGRB - Notified Regulations](#)
- **Drishti IAS sources:** [Oilfields Amendment Bill 2024](#)
 - [City Gas Distribution Scheme](#)

Drishti IAS

UPSC Mains Test Series - 2025

Package - II and III

English and Hindi Medium | Online and Offline Mode

Package - II (12 FLT's)

Starting from | **1st June, 2025**

Package - III (8 FLT's)

Starting from | **29th June, 2025**

Q91. "Sedition has become my religion" was the famous statement given by Gandhiji at the time of

- (a) the Champaran Satyagraha

- (b) publicly violating Salt Law at Dandi
- (c) attending the Second Round Table Conference in London
- (d) the launch of the Quit India Movement

Answer: (b)

Explanation:

- Mahatma Gandhi made the statement "**Sedition has become my religion**" during the **Civil Disobedience Movement of 1930**, specifically at Dandi after breaking the salt law on **April 6, 1930**.
- On April 6, after picking up a handful of salt and breaking the British-imposed salt law, Gandhi declared:
... **Sedition has become my religion**. Ours is a non-violent battle. We are not to kill anybody but it is our dharma to see that the curse of this Government is blotted out" **Hence, option (b) is correct.**
- Gandhi, along with 78 followers, began the historic Dandi March from Sabarmati Ashram on March 12, 1930, covering nearly 375 kilometers to reach Dandi on the Gujarat coast.
- This march was widely reported, inspiring mass resignations among village officials and widespread public participation.

Sources:

- [Speech at Borsad | Civil Disobedience : Complete Information about Dandi March](#)
- [The Civil Disobedience Movement of 1930 - Taurian World School](#)

Q92. The famous female figurine known as 'Dancing Girl', found at Mohenjo-daro, is made of

- (a) carnelian
- (b) clay
- (c) bronze
- (d) gold

Answer: (c)

Explanation:

- The '**Dancing Girl**' is one of the most iconic artefacts from the **Indus Valley Civilization**, discovered at **Mohenjo-daro**.
- This **bronze figurine**, approximately **10.8 cm (around four inches) in height**, dates back to **2500 BCE**, making it possibly the **earliest known bronze sculpture** in the Indian subcontinent. **Hence, option (c) is correct.**
- The figure is notable for its **simplified tubular limbs and torso**, suggesting an early understanding of human form in art. It depicts a **young girl with long hair tied in a bun**, wearing numerous **bangles on her left arm**, a **bracelet and an amulet or bangle on the right arm**, and a **cowry shell necklace** around her neck. Her **right hand rests on her hip**, while her **left hand is posed in a classical Indian dance gesture**, reflecting a sense of **movement and cultural tradition**.



Sources:

- [NCERT - ARTS OF THE INDUS VALLEY](#)
- Drishti IAS source: [Dancing Girl Figurine](#).

Q93. Who provided legal defence to the people arrested in the aftermath of Chauri Chaura incident?

- (a) C. R. Das
- (b) Madan Mohan Malaviya and Krishna Kant

(c) Dr. Saifuddin Kitchlew and Khwaja Hasan Nizami

(d) M. A. Jinnah

Answer: (b)

Explanation:

- Chauri Chaura, located in Gorakhpur district of the United Provinces (now Uttar Pradesh), became famous due to the incident in 1922 during the freedom movement.
- In 1923, **Mahamana Madan Mohan Malaviya**, a prominent lawyer and freedom fighter, came forward to provide legal defence to the people arrested and sentenced to death after the incident.
- He **argued continuously for four days** in court, passionately defending the accused. Because of his efforts, he was able to **convince the judge to review and reduce the death sentences**, helping many innocent persons.

Hence, option (b) is correct.

Sources:

- [Famous Trials from British Era: Chauri Chaura case - lawandbusinessnews](#)
- [Chauri Chaura \(UP Govt\)](#)

Q94. Subsequent to which one of the following events, Gandhiji, who consistently opposed untouchability and appealed for its eradication from all spheres, decided to include the upliftment of 'Harijans' in his political and social programme?

(a) The Poona Pact

(b) The Gandhi-Irwin (Delhi Pact) Agreement

(c) Arrest of Congress leadership at the time of the Quit India Movement

(d) Promulgation of the Government of India Act, 1935

Answer: (a)

Explanation:

- Gandhiji intensified his campaign for the upliftment of Harijans (Scheduled Castes) **following the Poona Pact of September 1932**, which was signed between Madan Mohan Malviya and Dr. B.R. Ambedkar. The Pact led to the **abandonment of separate electorates for the depressed classes** but introduced **reservations in joint electorates**, which Gandhi accepted only after launching a fast unto death.
- Deeply affected by the plight of untouchables, Gandhi made their social emancipation a core part of his national movement. Shortly after the pact:
 - He founded the **All India Anti-Untouchability League** (September 1932), later known as **Harijan Sevak Sangh**.
 - He launched the weekly **Harijan** (January 1933).
 - From **1933 to 1934**, he undertook an all-India **Harijan tour** covering over 20,000 km to spread awareness, raise funds, and promote reforms.
 - His campaign stressed **temple entry, social integration, and the abolition of caste discrimination**.
 - Thus, the **Poona Pact marked the turning point** when Gandhiji formally incorporated Harijan upliftment into his political and social agenda.

Hence, option (a) is correct.

Sources:

- [A Brief History of Modern India](#) Page 392
- Drishti IAS source: [Sambhav Programme](#)

Q95. Consider the following fruits:

- I. Papaya
- II. Pineapple
- III. Guava

How many of the above were introduced in India by the Portuguese in the sixteenth and seventeenth centuries?

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

Answer: (c)

Explanation:

- The Portuguese were the earliest Europeans to arrive in India and played a crucial role in introducing several American crops and fruits during the 16th and 17th centuries. Among these, **pineapple, papaya, and guava**—all native to the Americas—were introduced to India by the Portuguese.
 - **Pineapple** was brought from Brazil and is mentioned in the *Ain-i-Akbari* (1590s), showing it was cultivated in India by then. It spread quickly and was cultivated in Mughal imperial orchards and Portuguese settlements.
 - **Papaya** arrived via the Philippines and Malacca, becoming common in Portuguese territories like Daman by the early 1600s. It was well-liked and referred to as “Jesuit melon.”
 - **Guava** was introduced slightly later than pineapple and papaya. Though Abul Fazl mentions *amrud* in his writings, it likely referred to pears. The first clear mention of guava in India is by English physician John Fryer in 1673 near Madras, indicating its introduction by the Portuguese.

Hence, option (c) is correct.

Sources:

- [The Portuguese and the Introduction of American Fruit Plants into India](#)
- [ECONOMY \(NIOS\)](#)
- [Why guava is attractive for farmers & consumers alike](#)
- [PINEAPPLE](#)

Q96. Consider the following countries:

- I. United Kingdom
- II. Denmark
- III. New Zealand

IV. Australia

V. Brazil

How many of the above countries have more than four time zones?

(a) All the five

(b) Only four

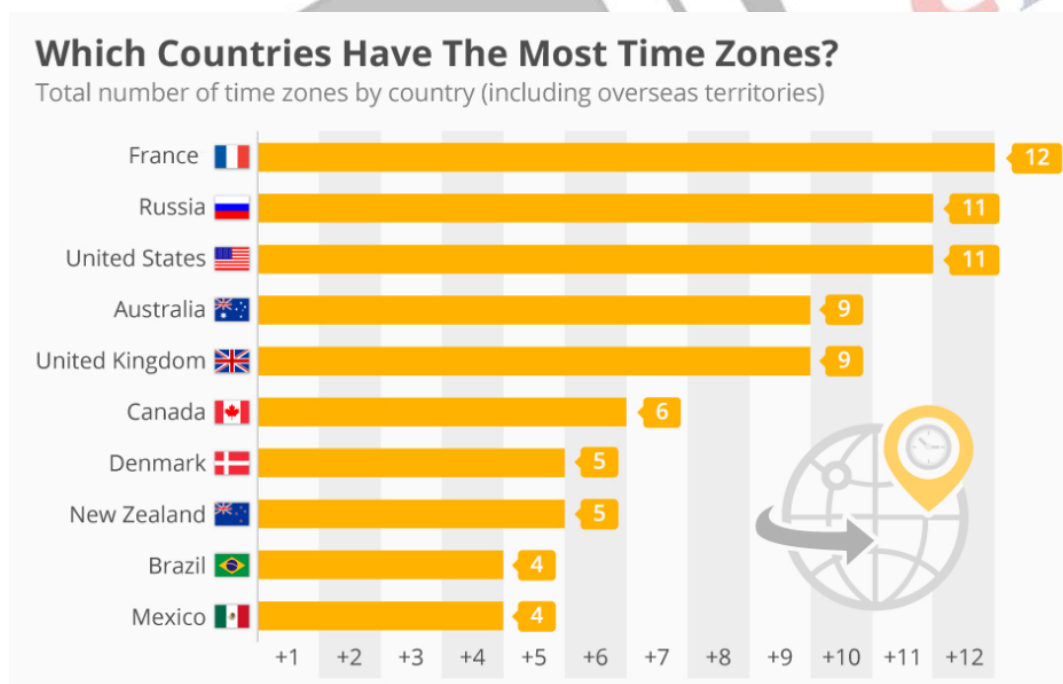
(c) Only three

(d) Only two

Answer: (b)

Explanation:

- **United Kingdom** spans **9 time zones** due to its numerous overseas territories like Pitcairn Islands, Bermuda, and British Indian Ocean Territory.
- **Denmark** controls **5 time zones**, primarily because of Greenland, which itself spans multiple zones, along with the Faroe Islands.
- **New Zealand** has **5 time zones**, covering its main islands, Chatham Islands, Niue, Tokelau, and the Cook Islands.
- **Australia** spans **9 time zones** when including its external territories like Christmas Island, Norfolk Island, and daylight saving time variations across states.
- **Brazil**, however, has **only 4 time zones**, ranging from UTC-2 to UTC-5, including mainland and adjacent island groups.
- Hence, **only four countries**—UK, Denmark, New Zealand, and Australia—have more than four time zones, while Brazil does not.



- Hence, option (b) is correct.

Sources:

- [Countries with highest number of time zones | Times of India Travel](#)

- [10 Countries With The Most Time Zones - WorldAtlas](#)
- Drishti IAS source: [Demand for 2 Time Zones in India](#)

Q97. Consider the following statements:

I. Anadyr in Siberia and Nome in Alaska are a few kilometers from each other, but when people are waking up and getting set for breakfast in these cities, it would be different days.

II. When it is Monday in Anadyr, it is Tuesday in Nome.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Answer: (a)

Explanation:

- This question is based on the **International Date Line (IDL)** and its effect on time and date differences between geographically close locations.
- Anadyr (Siberia) and Nome (Alaska, USA) are relatively close across the Bering Strait. However, the **International Date Line (IDL)** passes between them.
 - The IDL is an **imaginary line around 180° longitude** where the date changes by one day when crossed.
- **Anadyr lies to the west of the IDL**, while **Nome is to the east**. Due to this, despite their close distance, they are placed **on different calendar days**. Hence, **statement I is correct**.
- Anadyr is **ahead of Nome** by about 20 hours. So when it is **Monday in Anadyr**, it is still **Sunday in Nome**, not Tuesday. Hence, **statement II is NOT correct**.



Hence, option (a) is correct.

Sources:

- [Certificate Physical and Human Geography True copy\[upscpdf.com\].pdf](#) ; Page-Page-10
- [The International Date Line](#)
- [Current Local Time in Anadyr, Russia](#)
- [Current Local Time in Nome, Alaska, USA](#)

Q98. Who among the following was the founder of the 'Self-Respect Movement'?

- (a) Periyar E. V. Ramaswamy Naicker
- (b) Dr. B. R. Ambedkar
- (c) Bhaskarrao Jadhav
- (d) Dinkarrao Javalkar

Answer: (a)

Explanation:

- The **Self-Respect Movement** was founded in **1925** in **Tamil Nadu** by **Periyar E.V. Ramaswamy Naicker**, also known as Periyar. He was a **Baliya Naidu** by caste and launched the movement to challenge **Brahminical dominance, religious orthodoxy, and caste-based oppression. Hence, option (a) is correct.**
- The movement **rejected the Brahminical religion and culture**, which Periyar believed were tools of **lower caste exploitation.**
- It **promoted rationalism, gender equality, and self-respect among the non-Brahmin and oppressed communities.**
- Periyar also **formalised marriages without Brahmin priests**, symbolically challenging Brahmin supremacy.
- His ideas were in line with a broader South Indian anti-caste sentiment, similar to those of **Sri Narayana Guru** in Kerala.
- This movement played a pivotal role in **social reform** in South India and laid the foundation for **Dravidian politics** in Tamil Nadu.

Sources:

- [NCERT - Women, Caste and Reform](#)
- [Spectrum: A Brief History of Modern India](#) ; Page-226
- [Drishti IAS sources: Caste Movement in India](#)
 - [Mains Practice Questions](#)

Q99. Consider the following pairs:

Country	Resource-rich in
I. Botswana	Diamond
II. Chile	Lithium
III. Indonesia	Nickel

In how many of the above rows is the given information correctly matched?

- (a) Only one
- (b) Only two
- (c) All the three

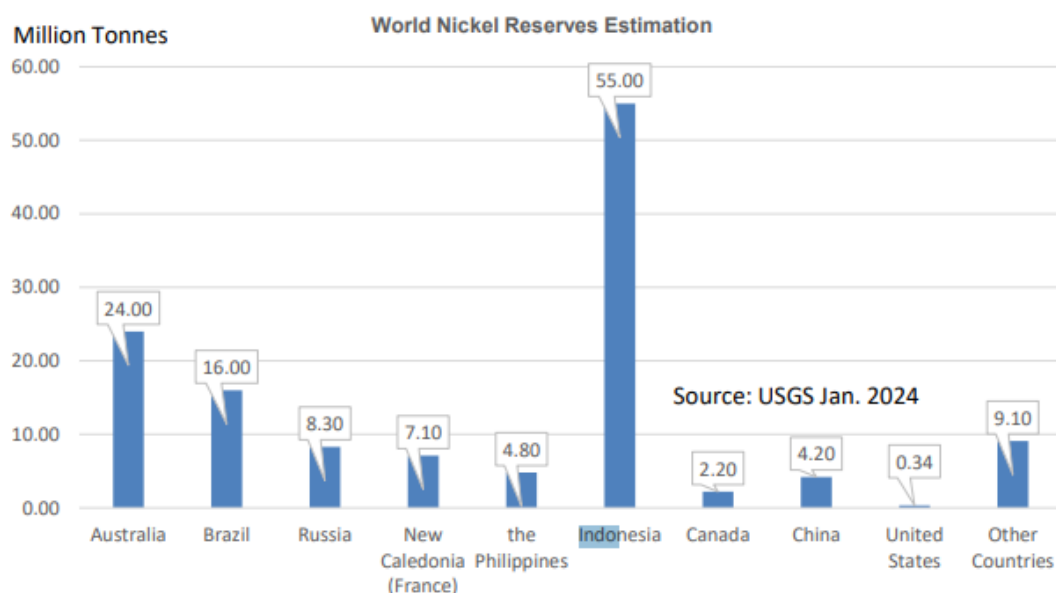
(d) None

Answer: (c)

Explanation

- Botswana is one of the **world's leading producers of diamonds** by value. **Jwaneng and Orapa are major mines.** The diamond industry contributes significantly to Botswana's GDP and has transformed it into one of Africa's most stable economies. **Hence, pair I is correct.**
- Chile is among the **top three global producers of lithium**, essential for batteries used in electric vehicles and electronics. The country holds a major portion of the **world's lithium reserves** in the **Atacama Desert**, where lithium is extracted from salt flats (salars). Chile is part of the **"Lithium Triangle"** along with Bolivia and Argentina. **Hence, pair II is correct.**
- Indonesia is the **largest producer of nickel** in the world. It has vast nickel reserves and has leveraged this resource as part of its strategy to develop a domestic EV battery supply chain. The government has banned raw nickel exports to encourage local processing and attract foreign investment in nickel smelters and battery production. **Hence, pair III is correct.**

THE WORLD NICKEL FACTBOOK 2024



World Diamond Production in Carats and Value 2021

	Carats	Value		
	'000	% share	\$m	% share
Botswana	22,878	19%	4,657	33%
Russia	39,117	33%	2,643	19%
Angola	8,723	7%	1,626	12%
Canada	17,615	15%	1,512	11%
South Africa	9,718	8%	1360	10%
Namibia	1,763	1%	823	6%
Zimbabwe	4,225	4%	670	5%
Lesotho	339	0%	257	2%
DRC	14,091	12%	168	1%
Sierra Leone	839	1%	164	1%
Others	732	1%	111	1%
Totals	120,041	100%	13,989	100%

Source: Kimberley Process Certification Scheme

Sources:

- [Botswana country profile - BBC News](#)
- [Botswana - Mining & Minerals](#)
- [Lithium find in J&K: Chile, with most reserves, ready to share know-how | India News - The Indian Express](#)
- [A Journey Through Chile's Lithium Landscape | Columbia Global Centers](#)
- [THE WORLD NICKEL FACTBOOK 2024](#)
- [Interesting Diamond Facts & Statistics](#)
- Drishti IAS source: [India's Critical Minerals Roadmap](#)

Q100. Consider the following pairs:

Region	Country
I. Mallorca	Italy
II. Normandy	Spain
III. Sardinia	France

In how many of the above rows is the given information correctly matched?

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

Answer: (d)

Region	Country	In news
I. Mallorca	Spain	Anti-Tourism protest
II. Normandy	France	Commemoration of the 80th anniversary of the D-Day landings on June 6, 1944
III. Sardinia	Italy	Wildfires in the Italian island of Sardinia

- Hence, option (d) is correct.

Sources:

- [Club in deadly Mallorca collapse lacked permit for rooftop: Mayor](#)
- [France gets ready to say 'merci' to World War II veterans for D-Day's 80th anniversary this year - The Hindu](#)

Simplify Doubts, Strengthen Concepts

IAS GS Foundation Course 2025

UPSC Prelims + Mains | Live Online Batch

AI Summary
Instant Summary of the Lecture

AI Quiz
Take AI Generated Quiz Based on the Lecture

Ask Me a Question
Instant AI - Powered Answer

Admissions Open
87501 87501

PDF Reference URL: <https://www.drishtiias.com/printpdf/2025-prelims-analysis>