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Use this guide to assess your performance, spot emerging trends in the paper, and fine-tune your preparation strategy for upcoming attempts.

# UPSC PRELIMS 2025 ANSWER KEY SET A/B/C/D

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Q. No.	Α	В	С	D		Q. No.	Α	В	С	D	Q. No.		Α	В	С	D	Q. No.	А	В	С	D
1	В	С	D	В		26	С	С	*	Α		51	С	D	С	В	76	*	С	С	С
2	D	D	С	С		27	Α	В	Α	С		52	С	С	D	D	77	Α	С	Α	В
3	Α	С	С	В		28	С	D	Α	В		53	А	С	С	Α	78	Α	С	С	D
4	В	С	D	Α		29	С	В	С	D		54	С	D	С	В	79	С	В	С	В
5	D	С	А	С		30	С	С	D	Α		55	С	Α	С	D	80	D	D	С	С
6	С	В	D	*		31	Α	В	D	С		56	В	D	В	С	81	Α	С	С	С
7	Α	С	А	Α		32	D	D	Α	С		57	D	Α	С	Α	82	Α	С	С	D
8	Α	D	А	Α		33	С	Α	D	Α		58	Α	Α	D	Α	83	С	Α	В	С
9	Α	D	А	С		34	Α	В	С	С		59	D	Α	D	А	84	В	С	А	С
10	Α	Α	В	D		35	Α	D	Α	С		60	D	В	Α	Α	85	Α	С	В	С
11	Α	Α	А	D		36	С	С	С	D		61	D	Α	Α	В	86	Α	D	С	В
12	С	D	Α	Α		37	D	Α	С	D		62	А	Α	D	С	87	С	D	В	С
13	В	С	С	D		38	С	Α	С	А		63	В	С	С	D	88	В	Α	D	D
14	Α	А	В	С		39	В	Α	В	D		64	С	В	Α	D	89	В	D	В	D
15	В	А	Α	А		40	В	Α	D	В		65	Α	Α	А	С	90	Α	В	С	Α
16	С	С	Α	С		41	С	В	С	D		66	С	А	С	С	91	D	В	В	Α
17	В	D	С	С		42	D	С	С	С		67	С	С	D	А	92	С	С	D	D
18	D	С	В	С		43	С	D	А	С		68	С	В	С	С	93	С	В	А	С
19	В	В	D	В		44	С	D	С	D		69	В	D	В	С	94	D	Α	В	Α
20	С	В	А	D		45	С	С	С	А		70	D	Α	В	С	95	Α	С	D	Α
21	В	С	В	Α		46	В	С	D	D		71	В	D	В	С	96	D	*	С	С
22	С	С	С	Α		47	С	А	D	Α		72	С	Α	С	С	97	Α	А	Α	С
23	D	В	В	С		48	D	С	А	А		73	В	D	D	В	98	Α	Α	А	С
24	D	А	А	В		49	D	С	D	А		74	А	С	D	А	99	Α	С	А	В
25	С	В	С	Α		50	Α	С	В	В		75	С	Α	С	В	100	В	D	А	В

#### **UPSC Prelims Marking Scheme 2025**

Aspirants can estimate their scores using the UPSC Answer Key 2025 by applying the official marking scheme released by the Union Public Service Commission. The UPSC Prelims Exam carries a total of 400 marks—Paper 1 awards 2 marks for each correct answer, while Paper 2 (CSAT) gives 2.5 marks per correct response. A negative marking of one-third of the assigned mark applies to each wrong answer. Using the answer key, candidates can calculate probable scores and assess their chances of clearing the Prelims cutoff.



Particular	Paper 1	Paper 2
Correct Answer	+2	+2.5
Incorrect Answer	-0.66	-0.83
Unanswered	0	0
No. of Questions	100	80
Total Marks	200	200

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#### 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

**Correct Option: (c)** 

#### **Explanation**

All three options represent alternative powertrain technologies, as they utilize non-traditional propulsion systems designed to cut down on fossil fuel use and reduce emissions.

#### Statement I - Correct: Battery Electric Vehicles (BEVs)

BEVs run entirely on electricity stored in rechargeable batteries, without any internal

Statement II – Correct: Hydrogen Fuel Cell Vehicles
These vehicles generate electricity through in fuel cells. The These vehicles generate electricity through a chemical reaction between hydrogen and oxygen in fuel cells. The electricity powers electric motors, and the only byproduct is water vapor. Examples: Toyota Mirai, Hyundai NEXO

#### Statement III - Correct: Fuel Cell Electric Hybrid Vehicles (FCEVs)

FCEVs combine a hydrogen fuel cell with a battery system or regenerative braking, allowing dual-source propulsion. While still in the developmental or pilot phase, they function similarly to plug-in hybrids but use fuel cells instead of conventional engines.

In summary, each of these vehicle types moves away from conventional internal combustion engines, qualifying them as alternative powertrain vehicles.



## 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. Al the three
- d. None

**Correct Option: (d)** 

#### **Explanation**

#### Statement I - Incorrect: All UAVs can perform vertical landing.

Not all UAVs are capable of vertical landing. Only **VTOL** (**Vertical Take-Off and Landing**) drones, such as **quadcopters** or specially designed **fixed-wing hybrids**, can achieve this. Traditional **fixed-wing drones**, resembling small airplanes, generally require runways or specific launch/recovery mechanisms.

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#### Statement II - Incorrect: All UAVs can hover automatically.

Hovering is only possible with **multirotor** or **rotary-wing** configurations. **Fixed-wing UAVs** cannot hover and must maintain forward motion to generate lift.

#### Statement III - Incorrect: All UAVs rely solely on batteries for power.

While many small UAVs (particularly for commercial, recreational, or surveillance purposes) are battery-operated, not all UAVs depend exclusively on batteries. Some use **petrol**, **hybrid systems**, or **solar power**. The statement is partially true for a significant subset of UAVs, but not universally applicable.

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

- 1. Cobalt
- 2. Graphite
- 3. Lithium
- 4. Nickel

How many of the above usually make up battery cathodes?

- a. Only one
- b. Only two
- c. Only three



d. All the four

**Correct Option: (c)** 

#### **Explanation:**

Cobalt – Used in the cathode of many lithium-ion batteries, especially in lithium cobalt oxide (LCO) and nickel manganese cobalt oxide (NMC) chemistries.

Included in cathode

Graphite – Used as the anode, not the cathode, in most lithium-ion batteries. Not in cathode

Lithium – A key component in both the cathode and the electrolyte of lithium-ion batteries. Included in cathode

Nickel - Commonly used in the cathode material for high-energy batteries (e.g., NMC, NCA). Included in cathode

#### Q4. Consider the following

- 1. Cigarette butts
- 2. Eveglass lenses
- 3. Car tyres

How many of them contain plastic?

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

#### **Correct Option: (c)**

#### **Explanation**

- Cigarette filters Commonly composed of plastic materials, they do not biodegrade easily and are a significant source of plastic waste. G LEADERS OF TOMOR
  - Contain plastic
- Eyeglass lenses Typically manufactured from lightweight plastic polymers like **polycarbonate** or **CR-39**, offering durability and impact resistance.
  - Contain plastic
- Car tyres Comprised of a combination of natural and synthetic rubber, along with plastic-based polymers such as styrene-butadiene rubber (SBR). They also shed microplastics during regular usage.
  - Contain plastic

#### **Consider the following substances:**



- 1. Ethanol
- 2. Nitroglycerine
- 3. 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

#### **Correct Option: (b)**

Option 2 is incorrect: Nitroglycerin, first synthesized by Ascanio Sobrero, was utilized by Alfred Nobel to create dynamite. It was in Nobel's dynamite factories during the late 1860s that nitroglycerin's antianginal properties were discovered. Nitroglycerin is therefore a vasodilator primarily used to relieve anginal chest pain. It is not produced through coal gasification. Hence, option (b) is the correct answer.

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 hydro-fluorocarbon refrigerants
- b. These are explosives in military weapons
- c. These are high-energy fuels for cruise missiles
- d. These are fuels for rocket propulsion

**Correct Option: (b)** 

**Explanation:** 

#### CL-20 (Hexanitrohexaazaisowurtzitane):

One of the most powerful non-nuclear explosives ever created, with detonation velocity and LEADERS OF TOMORRO pressure exceeding those of HMX and RDX.

Military explosive

#### HMX (High Melting Explosive or Octogen):

A highly potent explosive widely used in military applications like missile warheads, mines, and rocket propellants.

Military explosive

#### LLM-105 (2,6-diamino-3,5-dinitropyrazine-1-oxide):

A modern insensitive high explosive designed for high performance combined with reduced sensitivity, commonly used in warhead formulations.

Military explosive

All three belong to the class of high-energy materials (HEMs) extensively used in defense, particularly in warheads, bombs, and strategic munitions.



#### Q7. Consider the following statements:

- ١. 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

**Correct Option: (c)** 

#### **Explanation:**

#### Statement I is correct:

The Majorana 1 chip is developed for topological quantum computing, utilizing Majorana zero modes (MZMs). These unique quasiparticles are believed to resist decoherence—a key obstacle in quantum computing—making them ideal for stable qubits. The chip has been developed through collaborations involving Microsoft and Quantinuum, not AWS.

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#### Statement II is incorrect:

Research on Majorana-based quantum computing is mainly led by Microsoft and academic institutions such as Delft University and the University of Copenhagen. Although Amazon Web Services (AWS) offers the Braket quantum computing platform, it is not associated with the Majorana 1 chip.

#### Statement III is correct:

Deep learning is a subset of machine learning, featuring multi-layered neural networks that automatically identify features and learn complex patterns from large datasets. Examples include image recognition, language translation, and autonomous driving.

## Q8. With reference to monoclonal antibodies, often mentioned in news, consider the They are man-made proteins. EADERS OF TOMORR following statements:

- 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



**Correct Option: (d)** 

#### **Explanation:**

#### Statement I is correct:

Monoclonal antibodies (mAbs) are lab-engineered proteins designed to replicate the immune system's ability to combat pathogens. They are produced by cloning a specific type of white blood cell and target particular antigens on pathogens or cells.

#### Statement II is correct:

These antibodies attach with high precision to antigens, such as viral proteins or cancer markers, boosting immune responses like neutralization, phagocytosis, or cytotoxic effects.

#### Statement III is correct:

Monoclonal antibodies have been employed to treat viral infections including Ebola, COVID-19, and Nipah virus. For Nipah virus, m102.4—a human monoclonal antibody—has demonstrated effectiveness in non-human primate trials and has been used under emergency compassionate use provisions.

#### Q9. Consider the following statements:

- 1. No virus can survive in ocean waters.
- 2. No virus can infect bacteria.
- 3. 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

**Correct Option: (d)** 

**Explanation:** 

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### Statement I is incorrect:

Viruses do survive and are plentiful in ocean waters. Marine viruses are among the most abundant biological entities in oceans and play a crucial role in controlling microbial populations and maintaining ecosystem balance. For instance, cyanophages infect marine cyanobacteria.

#### Statement II is incorrect:

Bacteriophages, or phages, are viruses that specifically infect bacteria. They are extensively studied for their influence on bacterial ecology, horizontal gene transfer, and potential use as alternatives to antibiotics.

#### Statement III is incorrect:

Viruses alter host cellular transcription by commandeering the host's machinery to replicate



and transcribe their own genetic material. Many viruses manipulate these transcriptional processes to promote their survival and replication.

#### Q10. Consider the following statements:

#### Statements I:

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

#### Statements II:

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

#### Statements 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 Statements 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
- 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

#### Correct Option: (a)

#### **Explanation:**

#### Statement I is correct:

Activated carbon is extensively used for wastewater treatment, air purification, and industrial filtration because of its ability to adsorb various pollutants.

#### Statement II is correct:

With a very high surface area (500–1500 m²/g), activated carbon effectively adsorbs organic pollutants and heavy metals like lead, arsenic, and mercury from industrial waste.

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#### Statement III is correct:

Activated carbon can be easily produced from environmental or agricultural waste such as coconut shells, rice husks, and sawdust through processes like pyrolysis or chemical activation.

#### Do Statements II and III explain Statement I?

Yes. Statement II highlights why activated carbon is such an effective adsorbent, and Statement III explains its easy and cost-effective production. Together, they support Statement I's claim that activated carbon is a "good and attractive tool."

#### Q11. Consider the following statements:

#### Statements I:



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

#### Statements II:

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

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 Statements 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
- 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
- e. Explanation:
- f. Statement I is correct:

Cement production is a significant source of global CO<sub>2</sub> emissions, accounting for about 7-8% worldwide, mainly due to limestone decarbonation and fuel combustion during clinker production.

g. Statement II is correct:

In cement manufacturing, silica-rich clay or shale is combined with limestone to provide essential components like silica (SiO<sub>2</sub>), alumina (Al<sub>2</sub>O<sub>3</sub>), and iron oxides (Fe<sub>2</sub>O<sub>3</sub>) needed for clinker formation.

h. Statement III is correct:

During the calcination process in a kiln, limestone (CaCO<sub>3</sub>) breaks down into lime (CaO) and carbon dioxide (CO<sub>2</sub>), which is the primary source of process-related CO<sub>2</sub> emissions.

i. Do Statements II and III explain Statement I?

Yes. Statement II describes the raw materials used, while Statement III explains how CO<sub>2</sub> is released from limestone decomposition. Together, they clarify why cement production significantly contributes to global carbon emissions.

## DERS OF TOMORE 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 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 Statements 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
- 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

#### **Correct Option: (c)**

India has declined to endorse the COP28 Declaration on Climate and Health. This declaration focuses on the crucial link between climate change and global health, stressing the urgent need for significant cuts in greenhouse gas emissions, making Statement I correct.

However, a major issue arose because the draft included a commitment to reduce greenhouse gases from cooling systems within healthcare facilities—a requirement India finds challenging to fulfill. The COP28 Declaration on Climate and Health is a non-binding, non-negotiated appeal for collective action, reflecting countries' shared concern about integrating health into climate discussions at COP. Therefore, Statement II is incorrect.

India raised concerns that reducing greenhouse gases for cooling in the health sector could limit its capacity to address increasing medical needs, especially in remote and underserved regions. This decarbonization might undermine the resilience of India's healthcare system, so Statement III correctly explains Statement I.

#### Q13. Consider the following statements:

#### Statement I:

Scientific studies suggest that 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 NG LEADERS OF TOMORP 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 Statements 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
- 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



#### **Correct Option: (b)**

Researchers recently analyzed over 120 years of data to understand how melting ice, declining groundwater, and rising sea levels are affecting Earth's spin axis and causing days to lengthen. The length of a day on Earth is gradually increasing, with the pace of this change accelerating. This phenomenon is linked to the same processes that have caused the planet's axis to shift by about 30 feet (10 meters) over the past 120 years. These insights come from two recent NASA-funded studies examining how climate-driven redistribution of ice and water impacts Earth's rotation.

In recent decades, faster melting of ice sheets has moved mass from the poles toward the equatorial oceans. This happens when ice sheets and glaciers melt more than they accumulate snowfall, and when aquifers lose more groundwater than they are replenished by precipitation. These mass shifts cause the planet to wobble during its spin, leading to a shift in the axis location—a phenomenon known as polar motion. This redistribution also slows Earth's rotation, lengthening the day. Both the wobble and the slowing rotation have been recorded since 1900. The slowing effect is comparable to an ice skater extending their arms to reduce spinning speed.

Although solar flares and associated coronal mass ejections can send large amounts of energy into Earth's outer atmosphere, most of this energy is reflected back into space by Earth's magnetic field. While these solar events do not significantly affect Earth's rotation or axis, they do cause heating and expansion of the thermosphere, disrupt radio communications, and impact satellites and power grids. Auroras (northern and southern lights) are also a direct result of these interactions.

Hence, both Statement II and Sta<mark>tement III are correct, but o</mark>nly one of them explains Statement I.

#### Q14. Consider the following statements:

#### Statement I:

Article 6 of the Paris Agreement on climate change is frequently discussed in the 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.

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#### 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 Statements 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



Neither Statement II nor Statement III is correct

#### Correct Option: (a)

#### Explanation:

Statement 1 is correct. Article 6 of the Paris Agreement, which emphasizes international collaboration to meet climate goals, is often highlighted in the media because of its role in enabling carbon markets and helping countries achieve their emission reduction commitments.

Statement 2 is correct. Article 6 sets out the guidelines for carbon markets, allowing countries to cooperate voluntarily by transferring emission reductions to assist others in fulfilling their nationally determined contributions (NDCs).

Statement 3 is correct. Article 6 encourages global cooperation to meet climate targets through both market-based and non-market approaches, providing mechanisms for countries to jointly work toward their NDCs.

#### 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)

#### Correct Option: (a)

#### Explanation:

The Nature Solutions Finance Hub (NSFH) for Asia and the Pacific is a program initiated by the Asian Development Bank (ADB) at COP28 in December 2023. Its main objective is to secure a minimum of \$2 billion in investments by 2030 to promote nature-based solutions (NbS) aimed at tackling climate change, biodiversity loss, and environmental damage throughout the region.

## Q16. With reference to 'Direct Air Capture', an emerging technology, which of the following TOMORF statements is/are correct?

- It can be used as a way of carbon sequestration. ١.
- 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

**Correct Option: (c)** 

#### Explanation:

Statement 1 is correct. Direct Air Capture (DAC) is a technology that removes carbon dioxide (CO2) directly from the atmosphere, and it can be implemented anywhere.

Statement 2 is correct. DAC offers benefits to industries like food processing and plastics by supplying CO2 for various applications, which helps reduce dependence on fossil fuels and supports sustainability efforts. It also aids in achieving net-zero emissions by capturing atmospheric CO2 for use in production.

Statement 3 is correct. DAC technology can generate low-carbon synthetic fuels by capturing CO2 from the air and combining it with hydrogen produced via renewable energy. This process, called direct air carbon capture and utilization (DACCU), produces fuels such as methanol, dimethyl ether, and methane as cleaner alternatives to fossil fuels.

#### Q17. Regarding Peacock tarantula (Gooty tarantula), consider the following statements:

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

Which of the statements give above is/are correct?

- a. I only
- b. I and III
- c. II only
- d. II and III

**Correct Option: (d)** 

**Explanation:** 

Statement 1 is incorrect:

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This species is an arachnid—specifically a type of tarantula—not a crustacean. Its diet is strictly carnivorous, feeding mainly on insects and other invertebrates like crickets, cockroaches, caterpillars, and beetle larvae, and it occasionally scavenges on dead insects or small mammals.

#### Statement 2 is correct:

It is native exclusively to a very limited area (less than 100 km²) of deciduous forest in Andhra Pradesh, located in southeast India.

#### Statement 3 is correct:

As adults, these tarantulas are arboreal, residing in holes in tall trees and constructing asymmetric funnel webs. Juveniles tend to be more terrestrial, hiding in tree stumps or shallow burrows.



#### Q18. Consider the following statements:

- I. Carbon dioxide ( $CO_2$ ) emissions in India are less than 0.5 t  $CO_2$ /capita.
- II. In terms of  $CO_2$  emissions from fuel combustion, India ranks second in Asia-Pacific region.
- III. Electricity and heat producers are the largest sources of CO<sub>2</sub> emissions in India.

Which of the statements given above is/are correct?

- I. I and III only
- II. II only
- III. II and III only
- IV. I, II and III

**Correct Option: (c)** 

**Explanation:** 

#### **Statement 1 is incorrect:**

India's per capita  $CO_2$  emissions have risen over recent decades and are now significantly higher than 0.5 metric tons per person. As of 2023, the figure is around 2.07 metric tons per person. Although this remains low compared to many major economies, it exceeds the 0.5 metric tons per capita benchmark.

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#### Statement 2 is correct:

Regarding CO<sub>2</sub> emissions from fuel combustion, India ranks second in the Asia-Pacific region after China. According to the International Energy Agency (IEA), the regional ranking is:

- 1. China
- 2. India
- 3. Japan
- 4. Indonesia

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## Statement 3 is correct:

Electricity and heat production are the largest contributors to India's  $\rm CO_2$  emissions. In 2022, this sector was responsible for 53% of the country's total energy-related  $\rm CO_2$  emissions, making it the leading source of carbon emissions in India.

#### Q19. Consider the following pairs:

Plant Description

1. Cassava: Woody shrub

2. Ginger: Herb with pseudostem

3. Malabar spinach: Herbaceous climber

4. Mint: Annual shrub



5. 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

#### **Correct Option: (b)**

#### **Explanation:**

- Pair 1 is correctly matched: Cassava (Manihot esculenta) is a perennial, semi-woody shrub that typically grows between 1 and 5 meters tall, occasionally reaching up to 7 meters. It belongs to the Euphorbiaceae family, which includes diverse plant forms from herbs to trees. Cassava has a woody stem important for vegetative propagation, with morphology varying by age and variety.
- Pair 2 is correctly matched: Ginger (*Zingiber officinale*) is a herbaceous plant producing pseudostems—false stems made of tightly wrapped leaf bases (leaf sheaths) that grow annually from its underground rhizome. These pseudostems bear narrow leaves and can reach about one meter in height. The rhizome is a thick, branched underground stem that generates the pseudostems each season.
- Pair 3 is correctly matched: Malabar spinach (*Basella alba*) is a herbaceous climber. It is a fast-growing, soft-stemmed, semi-succulent vine reaching lengths up to 10 meters. It is perennial in tropical climates but often grown as an annual in cooler areas. The plant has twining stems and thick, fleshy leaves, making it a vigorous climbing herbaceous plant rather than a woody climber.
- Pair 4 is incorrectly matched: Mint (Mentha spp.) is not an annual shrub but a
  perennial herb that regrows year after year. It has soft, green stems rather than woody
  ones and spreads rapidly through underground runners. Mint is hardy, aromatic, and
  lives multiple years, dying back in winter and regrowing in spring.
- Pair 5 is incorrectly matched: Papaya (Carica papaya) is neither a woody shrub nor a true tree. It is classified as a large herbaceous or small tree-like plant, typically growing 5 to 10 meters tall with a single, soft, sparsely branched stem. It lacks secondary growth, so it doesn't develop woody tissue. Its stem is relatively soft, and its large leaves are concentrated at the top of the trunk.

#### **Q20.** 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 photosynthetic bacteria produce about 50% of 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

**Correct Option: (b)** 

#### **Explanation:**

- Statement 1 is incorrect: Scientific consensus indicates that oceans, mainly through phytoplankton, produce much more oxygen than rainforests. Estimates suggest that oceanic plankton—microscopic plants, algae, and some bacteria—generate about 50–80% of the Earth's oxygen. In comparison, all forests combined, including tropical rainforests, contribute a smaller portion, with tropical forests accounting for about one-third of land photosynthesis, and the Amazon producing only a part of that.
- Statement 2 is correct: It is accurate that marine phytoplankton and photosynthetic bacteria produce approximately half of the world's oxygen. Scientific studies confirm that oceanic plankton such as phytoplankton, algae, and bacteria like *Prochlorococcus* contribute around 50% of Earth's oxygen via photosynthesis, a level comparable to or exceeding that of all terrestrial plants combined.
- Statement 3 is incorrect: Well-oxygenated surface water holds far less oxygen than atmospheric air, not several times more. Typically, surface water contains about 8 mg of O<sub>2</sub> per liter, whereas atmospheric air contains roughly 210 mg of O<sub>2</sub> per liter. Thus, air has many times more oxygen per unit volume than even the most oxygen-rich water. This is because oxygen is much less soluble in water than in air, so water cannot hold as much oxygen as air does, even at full saturation.

#### 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

**Correct Option: (c)** 

Explanation:



- Statement 1 is correct: Raja Ram Mohan Roy was genuinely admired for his appreciation and respect for Eastern cultures, especially those of India. He was well-versed in Sanskrit, Persian, and Arabic, and had a profound understanding of Indian philosophies such as Hinduism, Buddhism, and Islam.
- **Statement 2 is correct:** Raja Ram Mohan Roy was a passionate supporter of rationalism and reason. He encouraged critical thinking and championed the cause of building a more enlightened society grounded in logic and evidence.

#### 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 Non-Cooperation Programme?

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

#### Correct Option: (c)

#### Explanation:

- Statement 1 is correct: The Non-Cooperation Movement involved boycotting British institutions like law courts and foreign goods, including textiles, as part of a peaceful resistance led by Mahatma Gandhi to achieve self-rule (Swaraj).
- Statement 2 is correct: The movement strongly emphasized non-violence, reflecting Gandhi's core philosophy of Satyagraha during 1920–1922.
- Statement 3 is incorrect: Participants were encouraged to give up British titles and honors as a protest, such as Gandhi relinquishing the "Kaiser-i-Hind" title, and others like Lala Murlidhar Rai surrendering his British-awarded titles.
- **Statement 4 is correct:** Gandhi promoted the creation of panchayats to settle disputes locally, especially as an alternative to British courts, supporting self-governance and justice within communities during the boycott period.

#### 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



**Correct Option: (b)** 

#### Explanation:

Araghatta is a type of Persian wheel—a mechanical device historically used in medieval India for irrigation. It consists of a large wheel fitted with buckets or pots, which is turned by animals such as bullocks or camels. As the wheel rotates, it lifts water from wells and channels it to irrigate agricultural fields. The term "Araghatta" is derived from Sanskrit, where "ara" means spoke and "ghatta" means pot, describing the wheel's design.

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

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- a. Mahendravarman I
- b. Simhavishnu
- c. Narasimhavarman I
- d. Simhavarman

#### Correct Option: (a)

#### Explanation:

Mahendravarman I, a king of the Pallava dynasty, held the titles "Mattavilasa," "Vichitrachitta," and "Gunabhara." The title "Mattavilasa" means "addicted to pleasures," "Vichitrachitta" means "curious-minded," and "Gunabhar<mark>a" means "virtuous." He w</mark>as also called "Chitrakarapuli," which means "tiger among painters." Mahendravarman I was renowned not only as a ruler but also for his contributions to art and literature, and for his strong support of various artistic endeavors.

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

- a. Samudragupta
- b. Chandragupta II
- c. Kumaragupta I ESTD 2022

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- d. Skandagupta

**Correct Option: (b)** 

#### **Explanation:**

Fa-Hien travelled to India during the reign of Chandragupta II of the Gupta Empire. He was a Chinese Buddhist pilgrim who came to India in the early 5th century AD.

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)

**Correct Option: (c)** 

#### **Explanation:**

Explanation: The Chola king who led a successful campaign against the Kingdom of Srivijaya was Rajendra I Chola. His expedition, which took place in 1025 CE, resulted in a significant weakening of Srivijaya and its influence over Southeast Asia.

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

#### Territorial region River flowing in the region

I. Asamaka: Godavari

II. Kamboja: Vipas

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

**Correct Option: (b)** 

Explanation:

#### Pair 1 is correctly matched:

The Asmaka (or Assaka) region was indeed located along the Godavari River. It was one of the sixteen Mahajanapadas and covered parts of modern Telangana, Maharashtra, and Andhra Pradesh. Its capital, variously named Podana, Potali, or Paudanyapura, is identified with present-day Bodhan in Telangana. The territory lay between the Godavari and neighboring regions such as Mulaka and Kalinga.

#### Pair 2 is incorrectly matched:

The Vipas River, known today as the Beas River, flows through Himachal Pradesh and Punjab in northwest India. The ancient Kamboja kingdom was located further northwest, around eastern Afghanistan and northern Pakistan, well outside the Beas River basin. Therefore, the Beas (Vipas) River does not flow through the Kamboja region.

#### Pair 3 is incorrectly matched:

The Mahanadi River does not flow through the Avanti kingdom. Avanti was located in present-day Malwa and western Madhya Pradesh, with the Narmada and Sipra rivers as its main



waterways. The Mahanadi flows much farther east through Chhattisgarh and Odisha, outside Avanti's historical territory.

#### Pair 4 is correctly matched:

The Kosala kingdom was situated along the Saryu River (modern Ghaghara). Ancient texts and history confirm Kosala spanned both banks of the Saryu, with Ayodhya—the capital—on its banks. The Saryu was the principal river defining Kosala's geography.

# 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

**Correct Option: (d)** 

#### **Explanation:**

The first Gandharva Mahavidyalaya, a music training school, was set up in Lahore on 5 May 1901 by Vishnu Digambar Paluska

• There is clear evidence that the original Gandharva Mahavidyalaya was established in Lahore in 1901 by Vishnu Digambar Paluskar.

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- On May 5, 1901, Paluskar set up a music school called Gandharva Mahavidyalaya in Lahore, which included a hostel, an instrument repair section, and a printing press for music publications.
- This institution is widely recognized as the first Gandharva Mahavidyalaya and the foundation for the later Akhil Bharatiya Gandharva Mahavidyalaya Mandal.
- The school remained in Lahore until Paluskar moved its headquarters to Bombay in 1908, but its origin in Lahore is well-documented and acknowledged by music historians and the institution's own records

# 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

**Correct Option: (b)** 

Explanation:



Ashokan inscriptions indicate that **Pradeshika**, **Rajuka**, and **Yukta** were key administrative officers at the district level during the Mauryan Empire. These officials played vital roles in local governance, revenue collection, land management, and the enforcement of royal policies and public welfare.

- **Pradeshika**: The chief officer of the district, responsible for overseeing overall administration, ensuring royal directives and policies were properly implemented in their jurisdiction.
- **Rajuka**: Served as the revenue officer and land surveyor. The Rajuka measured and assessed land, collected taxes, maintained land records, and exercised judicial authority to punish or acquit individuals related to land and revenue matters.
- Yukta: Acted as the accountant or treasurer of the district, handling financial records, revenue accounting, and managing monetary aspects of land administration.

Together, these officers formed an integrated administrative system at the district level, ensuring effective governance, proper revenue management, and justice, which was essential for maintaining the vast Mauryan Empire under Emperor Ashoka.

#### Q30. 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

**Correct Option: (c)** 

Explanation:

#### Statement 1 is correct:

At the Nagpur session of the Indian National Congress in December 1920, the Congress formally declared Swaraj (self-rule) as its ultimate goal, to be achieved by all legitimate and peaceful means. This declaration marked a crucial turning point where the Congress committed itself to non-violent and extra-constitutional methods, laying the foundation for the Non-Cooperation Movement. The movement aimed to challenge British authority through peaceful resistance and non-cooperation.

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#### Statement 2 is correct:

The Non-Cooperation Movement was designed as a **phased strategy** under Gandhi's leadership:



- Initially, participants were to undertake **peaceful non-violent actions** such as surrendering government titles, resigning from government jobs, boycotting British schools, courts, and foreign goods.
- If Swaraj was not achieved within a year and the government responded with repression, the movement was planned to **escalate to more assertive measures**, including civil disobedience and refusal to pay taxes.

This **stepwise escalation** reflected a strategic and disciplined approach to resistance, aiming to maximize pressure on the British government while maintaining non-violence.

#### Q31. With reference to investments, consider the following:

- 1. Bonds
- 2. Hedge Funds
- 3. Stocks
- 4. Venture Capital

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

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

**Correct Option: (b)** 

#### **Explanation:**

Among the four investment options listed—bonds, hedge funds, stocks, and venture capital—two are treated as Alternative Investment Funds (AIFs):

- Hedge funds are classified as Category III AIFs.
- Venture capital funds are classified as Category I AIFs.

Bonds and stocks are considered traditional investment options and are specifically excluded from the definition of alternative investments.

#### 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

**Correct Option: (d)** 

Explanation:

#### Pair 1 is correctly matched:

The Reserve Bank of India (RBI) earns income by **buying and selling government securities** (**bonds**). Through open market operations, the RBI purchases and sells these securities to control the money supply and maintain financial stability. It earns **interest** on the bonds it holds and may also gain from price changes, making this a significant source of its income.

#### Pair 2 is correctly matched:

Buying and selling **foreign currency** is another important source of income for the RBI. Managing India's foreign exchange reserves, the RBI intervenes in currency markets by buying or selling foreign currencies (like the US dollar). Profits can be earned especially when the rupee depreciates. Additionally, the RBI gains income from **interest and commissions** on foreign exchange reserves and their investments.

#### Pair 3 is incorrectly matched:

The RBI does not manage pension funds as a source of income. Pension fund management in India is regulated by the Pension Fund Regulatory and Development Authority (PFRDA) and handled by designated pension fund managers such as SBI Pension Fund and LIC Pension Fund. While RBI facilitates government pension disbursement, it is not involved in pension fund management or earning income from it.

#### Pair 4 is incorrectly matched:

The RBI does **not lend directly to private companies**. Its lending activities are primarily towards banks and financial institutions to maintain liquidity and financial stability. Lending to private companies is outside RBI's mandate and is not a source of its income.

#### Pair 5 is correctly matched: ///

The RBI earns income from **printing and distributing currency notes**, known as **seigniorage**. This profit is the difference between the face value of currency notes and the much lower cost of producing them. As the sole issuer of Indian currency, the RBI gains from this process.

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

	Organization	Some of its functions	It works under
l.	Directorate of Enforcement	Enforcement of the Fugitive Economic Offenders Act, 2018	Internal Security Division- I, Ministry of Home Affairs



Directorate of Revenue II.

Intelligence

Enforces the Provisions of the Department of Revenue, Ministry of Finance

Customs Act, 1962

Directorate General of III.

Systems and Data Management

Carrying out big data

analytics to assist tax officers Department of Revenue, for better policy and nabbing Ministry of Finance

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tax evaders

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

a. Only one

b. Only two

c. All the three

d. None

Correct Option: (a)

Explanation:

#### Row 1 is incorrectly matched:

The Enforcement Directorate (ED) is indeed empowered to enforce the Fugitive Economic Offenders Act, 2018. However, the ED functions under the Department of Revenue, Ministry of Finance, not under the Internal Security Division-I of the Ministry of Home Affairs. Enforcement of this Act is a financial matter, and jurisdiction lies clearly with the Ministry of Finance.

#### Row 2 is correctly matched:

The Directorate of Revenue Intelligence (DRI) enforces the Customs Act, 1962, and operates under the **Department of Revenue**, **Ministry of Finance**. It is the apex agency responsible for tackling smuggling, customs duty evasion, and commercial fraud. Its officers are primarily drawn from the Central Board of Indirect Taxes and Customs (CBIC), working under the Ministry of Finance.

#### Row 3 is incorrectly matched:

OMORR While the Directorate General of Systems and Data Management manages large volumes of data and supports tax administration, the primary responsibility for big data analytics to aid tax enforcement and policy lies with the Directorate General of Analytics and Risk Management (DGARM). DGARM is the apex body for analytics and risk management in tax administration, providing actionable intelligence. The Directorate General of Systems and Data Management supports DGARM by organizing and providing data, but it does not hold the main role in big data analytics.

#### Q34. Consider the following statements:

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

#### **Correct Option: (b)**

#### Explanation:

#### Statement 1 is incorrect:

The mandate for submitting Business Responsibility and Sustainability Reports (BRSR) comes from the **Securities and Exchange Board of India (SEBI)**, **not** from the Reserve Bank of India (RBI). SEBI requires the top 1,000 listed companies by market capitalization to submit BRSR as part of their annual disclosures, aiming to increase the number of companies covered over time.

RBI, however, has issued climate-related and sustainability disclosure guidelines specifically for regulated entities like banks and financial institutions, but it does not mandate BRSR submission for all listed companies.

#### Statement 2 is correct:

The disclosures in BRSR are predominantly **non-financial**. The BRSR framework focuses on Environmental, Social, and Governance (ESG) factors, such as environmental protection, human rights, employee welfare, corporate governance, and stakeholder engagement. These disclosures increase transparency about a company's sustainability practices and social responsibility, complementing the traditional financial reports.

#### Q35. Consider the following statements:

#### Statements I:

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

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#### 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 correct in respect of the above statements?

- a. Both Statement I and Statement II are correct and Statement II explains Statement I
- 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

**Correct Option: (d)** 

Explanation:

#### Statement 1 is incorrect:

Income from allied agricultural activities such as poultry farming, wool rearing, dairy, fisheries, and livestock breeding is **not exempt** from income tax in India, even if these activities are conducted in rural areas.

The Income Tax Act only exempts income derived directly from agricultural land—like crop cultivation or horticulture—as agricultural income. Income from allied activities is considered non-agricultural and is taxable regardless of location.

#### Statement 2 is correct:

Under the Income Tax Act, 1961, **rural agricultural land** is **not treated as a capital asset**. Therefore, any gains arising from the sale or transfer of rural agricultural land are **not subject to capital gains tax**.

Conversely, **urban agricultural land** is considered a capital asset, and gains from its sale are taxable under the capital gains provisions.

#### 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

**Correct Option: (c)** 

Explanation:

#### Statement 1 is correct:

India joined the Minerals Security Partnership (MSP) in June 2023, becoming its 14th member alongside countries like the United States, Australia, Canada, and the European Union. The MSP is a global initiative focused on securing and diversifying supply chains of critical minerals necessary for economic growth and clean energy transitions.

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#### Statement 2 is incorrect:

While India has identified 30 critical minerals vital for its economic growth, clean energy transition, and national security, it is **not resource-rich in all these minerals**.

India remains heavily **import-dependent for over 80%** of its critical mineral requirements, including lithium, cobalt, nickel, and rare earth elements.

Though lithium reserves were recently discovered in Jammu & Kashmir, domestic production is still at an early stage and insufficient to meet demand.

Most rare earth elements and other critical minerals needed for batteries, electronics, and renewables are largely imported.

#### Statement 3 is correct:

In 2023, the Mines and Minerals (Development and Regulation) Act, 1957 was amended by Parliament.

The amendment grants the Central Government exclusive rights to auction mining leases and composite licenses for certain critical minerals, such as rare earth elements, lithium, cobalt, and graphite.

This is intended to boost exploration and extraction, promote private sector involvement, and reduce reliance on imports for these strategic minerals.

#### Q37. Consider the following statements:

#### Statements 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

#### Correct Option: (a)

#### Explanation:

#### Statement 1 is correct:

Bondholders generally face **lower risk** compared to stockholders because they are creditors to the company. They receive **fixed interest payments** and have a **higher claim on company assets** in case of bankruptcy. Their returns tend to be more stable and less volatile, whereas



shareholders, as partial owners, experience returns that fluctuate based on company performance and market conditions, making their investment inherently riskier.

#### Statement 2 is correct:

Bondholders act as **lenders** by purchasing bonds, which are debt instruments. They do **not own** any part of the company but receive fixed interest and repayment of principal.

Stockholders, in contrast, are **owners** of the company, holding shares that confer **voting rights** and a claim on profits through dividends or capital gains.

#### Statement 3 is correct:

In the hierarchy of claims, bondholders are **prioritized over stockholders** for repayment. Bondholders have a contractual right to receive interest and principal before shareholders receive dividends. In bankruptcy or liquidation, bondholders' claims are settled **before** any assets are distributed to stockholders, who are residual claimants.

#### Q38. Consider the following statements:

- I. India accounts for a very large portion of all equity option contracts traded globally thus exhibiting a great boom.
- II. India's stock market has grown rapidly in the recent past even overtaking Hong Kong's at some point of time.
- III. 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 give above are correct?

- a. I and II only
- b. II and III only
- c. I and III only
- d. I, II and III

Correct Option: (a)

Explanation:

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#### Statement 1 is correct:

India has become one of the largest global markets for equity options contracts by volume. Over recent years, the options premiums have surged dramatically—about 11 times in five years up to March 2025—largely fueled by a strong retail investor base and increased activity from global high-frequency traders and market makers. In 2024 alone, more than 120 billion index options contracts were traded on the National Stock Exchange (NSE), far exceeding volumes on many other global exchanges. However, recent regulatory steps have somewhat tempered this explosive growth.

#### Statement 2 is correct:

India's stock market has witnessed rapid expansion and has occasionally surpassed Hong Kong's market capitalization. For example, in January 2024, India's stock market cap briefly overtook Hong Kong's, making it the fourth-largest public equity market globally at that time. This was driven by strong investor participation, a favorable economic outlook, and solid



performance of key indices like the Nifty 50 and Sensex. The rankings are dynamic, with Hong Kong regaining some ground by March 2025 in terms of share sales, reflecting global market competitiveness.

#### Statement 3 is incorrect:

India does have an active regulatory body—Securities and Exchange Board of India (SEBI)—which protects investors, including those trading options. SEBI issues regular warnings about the risks involved, enforces regulations to limit speculation, and protects retail investors by setting rules such as larger contract sizes and upfront premium payments. SEBI also takes action against unregistered financial advisors and unregulated trading platforms to safeguard investor interests. Therefore, it is false to say India lacks a regulatory body protecting small investors in options trading.

#### 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 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

#### **Correct Option: (a)**

Explanation:

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#### **Statement 1 is correct:**

A circular economy significantly reduces greenhouse gas (GHG) emissions by designing out waste and pollution and keeping materials in use for as long as possible. This approach not only cuts emissions from energy use but also addresses those from industry, agriculture, and land use. Studies estimate that circular economy strategies could reduce global GHG emissions by up to 39%. Key sectors benefiting the most include the built environment, transport, food systems, and waste management. Practices like recycling, reusing, and efficient product design help retain embodied energy and reduce the need for new resource extraction, thereby lowering emissions.

#### Statement 2 is correct:

The circular economy minimizes the consumption of raw materials by extending product lifecycles through reuse, repair, refurbishment, and recycling. This reduces the need for



extracting and processing new raw materials, conserving natural resources and lowering environmental impact. Projections suggest that a full circular economy could reduce the use of primary raw materials by up to 68% by 2050 compared to traditional linear economic models.

#### Statement 3 is correct:

By focusing on product and system design that prevents waste, and promoting reuse, repair, and recycling, the circular economy greatly reduces wastage in production processes. Waste is viewed as a design flaw rather than inevitable, contrasting with the traditional linear "take, make, dispose" model that generates substantial waste. Implementing circular principles helps companies minimize production waste and promotes sustainable resource management.

#### 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 give above are correct?

- a. I and II only
- b. II and III only
- c. I and III only
- d. I, II and III

#### Correct Option: (a)

Explanation:

#### Statement I: Correct.

Capital receipts in government finance either create a liability (such as borrowings that increase government debt) or reduce assets (such as disinvestment proceeds from selling government-owned assets like shares in public sector undertakings). This is a basic principle distinguishing capital receipts from revenue receipts.

#### Statement II: Correct.

Borrowings (like issuing government bonds) and disinvestment (selling stakes in public enterprises) are both examples of capital receipts in the Indian budget, as they respectively create liabilities or reduce government assets.

#### Statement III: Incorrect.

Interest received by the government on loans given (to states, PSUs, etc.) is classified as a revenue receipt, specifically non-tax revenue. It does not create liabilities nor reduce assets, but rather represents income.

**Conclusion:** Only statements I and II are correct.

#### Q41. Consider the following statements:

1. Austria



- 2. Bulgaria
- 3. Croatia
- 4. Serbia
- 5. Sweden
- 6. 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

**Correct Option: (b)** 

#### **Explanation:**

NATO Membership: The North Atlantic Treaty Organization (NATO) includes countries committed to collective defense. Checking the listed countries:

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- **Austria**: Not a NAT<mark>O memb</mark>er; it maintains neutrality.
- Bulgaria: Joined NATO in 2004.
- Croatia: Joined NATO in 2009.
- Serbia: Not a NATO member; it pursues a neutral stance and cooperates via NATO's Partnership for Peace.
- Sweden: Joined NATO in 2024.
- North Macedonia: Joined NATO in 2020.
- Count: Bulgaria, Croatia, Sweden, and North Macedonia are NATO members, Q42. Consider the following countries: ADERS OF TOMORRO

- 2. Brazil
- 3. Colombia
- 4. Ecuador
- 5. Paraguay
- 6. Venezuela

Andes mountains pass through how many of the above countries?

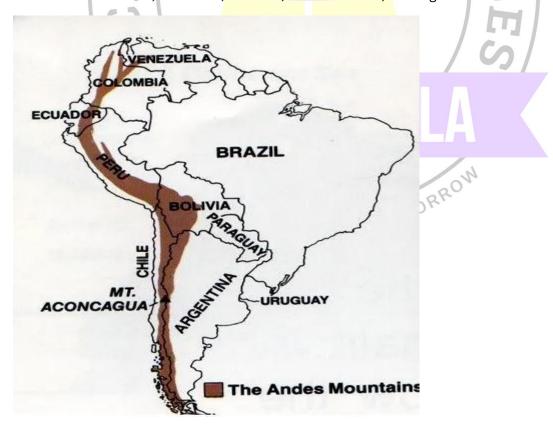


- a. Only two
- b. Only three
- c. Only four
- d. Only five

**Correct Option: (c)** 

#### **Explanation:**

- Andes Mountains: The Andes, the longest continental mountain range, run along South America's western edge. Checking the countries:
  - o **Bolivia**: The Andes traverse western Bolivia (e.g., Andes highlands).
  - Brazil: The Andes do not pass through Brazil; it's mostly Amazon and Atlantic coast.
  - o Colombia: The Andes run through western Colombia (e.g., Colombian Andes).
  - Ecuador: The Andes cross central Ecuador (e.g., Quito lies in the Andes).
  - Paraguay: No Andes; it's mostly lowlands and Chaco region.
  - Venezuela: The Andes extend into northern Venezuela (e.g., Mérida Andes).
- Count: Bolivia, Colombia, Ecuador, and Venezuela, totaling four.



Q43. Consider the following water bodies:



- 1. Lake Tanganyika
- 2. Lake Tonle Sap
- 3. Patos Lagoon

Through how many of them does the equator pass?

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

**Correct Option: (d)** 

#### **Explanation:**

- **Equator's Path**: The equator crosses the Earth at 0° latitude, passing through parts of Africa, Asia, and South America. Checking the water bodies:
  - Lake Tanganyika: Located in East Africa (Tanzania, Burundi, DRC, Zambia), it lies between 3°S and 9°S, south of the equator.
  - Lake Tonlé Sap: In Cambodia, it's around 12°N to 13°N, north of the equator.
  - Patos Lagoon: In southern Brazil, around 30°S to 32°S, far south of the equator.
- Conclusion: None of these water bodies lie on the equator's path.

#### Q44. 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

**Correct Option: (d)** 

Explanation:

#### Statement I: Correct.

India produces about 80% of the world's turmeric and is the largest exporter, with major export



destinations including the UAE and the US. In 2022-23, turmeric exports from India were valued at over \$200 million.

#### Statement II: Correct.

India cultivates more than 30 varieties of turmeric, including well-known ones like Alleppey Finger, Erode, and Sangli. These varieties are recognized and documented by institutions such as the Indian Institute of Spices Research.

#### Statement III: Correct.

The top turmeric-producing states in India include Telangana, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, and Odisha, according to agricultural data from 2022-23.

Conclusion: All three statements are correct.

Answer: (d) I, II, and III

#### 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

**Correct Option: (c)** 

#### Statement I: Correct

- Matching geological formations (like ancient rock belts and mountain ranges) along the
  eastern coast of South America (e.g., Brazil) and the western coast of Africa strongly
  support the theory of continental drift.
- These similarities suggest the continents were once joined together as part of Pangaea, then drifted apart.

#### Statement II: Correct

- Similar gold deposits in Ghana (West Africa) and Brazil indicate a common geological history.
- These mineralogical similarities are cited as evidence of the **previous physical connection** between the two landmasses before the Atlantic Ocean formed.



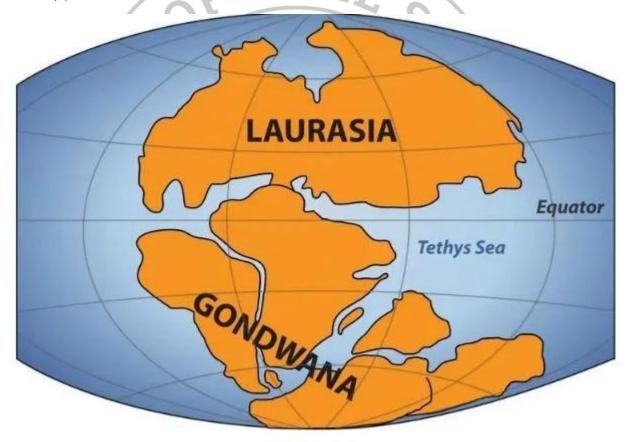
#### Statement III: Correct

- The **Gondwana coal-bearing formations** in India match similar fossil and sedimentary records in **Australia**, **Africa**, **Antarctica**, **South America**, and **Madagasca**r.
- This widespread distribution of similar rock strata and fossils supports the idea of a **supercontinent—Gondwanaland**.

#### **✓** Conclusion:

All three statements present **strong geological evidence** for **continental drift**, as originally proposed by Alfred Wegener.

Answer: (d) All three are valid evidences.



## TRIASSIC 200 million years ago

#### Q46. Consider the following statements:

#### Statements 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

**Correct Option: (c)** 

#### **Explanation:**

#### Statement I: Valid.

Regions located in subtropical and temperate zones—such as the Sahara Desert and the Middle East—typically have higher levels of atmospheric dust. This is mainly because these areas are dry and frequently experience dust storms. In contrast, equatorial regions (which are humid) and polar areas (which are cold) do not produce as much atmospheric dust.

#### Statement II: Invalid.

Contrary to what the statement suggests, subtropical and temperate areas, especially those that are arid, actually experience **more** dry winds (like trade winds and the sirocco), not fewer. These winds are a major factor in lifting dust into the air.

#### Relationship:

Because Statement II is incorrect, it doesn't explain Statement I. Nevertheless, Statement I remains independently accurate.

#### Conclusion:

Statement I is true, while Statement II is false.

#### Q47. Consider the following statements:

#### Statement I:

In January, in the Northern Hemisphere, the isotherms bend equatoward while crossing the landmasses, and poleward while crossing the oceans.

**ESTD 2022** 

#### 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

Correct Option: (a)

**Explanation:** 

#### Statement I: True.

During January, which is winter in the Northern Hemisphere, **isotherms** (lines connecting places with the same temperature) tend to bend **towards the equator** over continents because land cools faster. Conversely, over oceans, which remain relatively warmer, the isotherms curve **towards the poles**.

#### Statement II: True.

Water bodies, like oceans, have a higher heat retention capacity than land. As a result, in winter, areas above oceans (such as the North Atlantic) remain warmer than areas above land (like Siberia).

#### Relationship:

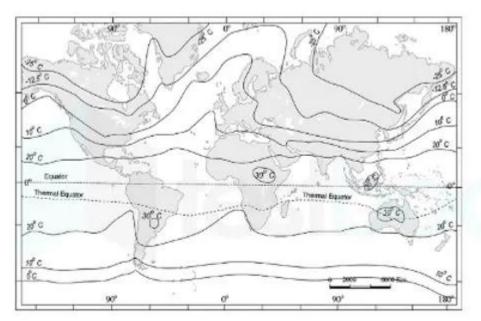
Statement II provides the reason behind the behavior described in Statement I. The temperature contrast between land and ocean surfaces causes the isotherms to shift accordingly.

#### Conclusion:

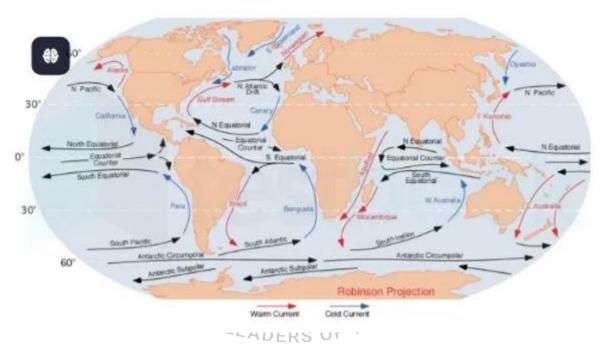
Both statements are correct, and Statement II effectively explains Statement I.







The distribution of surface air temperature in the month of January



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
- 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

#### **Correct Option: (c)**

#### **Explanation:**

#### Statement I: True.

Chalk allows water to pass through because it is permeable, while clay resists water flow, making it impermeable.

#### Statement II: True.

Chalk contains many tiny pores, which makes it porous and thus capable of absorbing and transmitting water — this explains its permeability.

#### Statement III: False.

Clay is not completely free of pores; it does have very fine ones. However, its particles are so tightly packed that water cannot move through easily, which is why it is impermeable — not because it lacks pores entirely.

# Relationship:

Statement II supports part of Statement I by explaining why chalk is permeable. Statement III, however, misrepresents clay's structure and does not accurately explain its impermeability.

#### Conclusion:

Only Statement II is accurate and partially supports Statement I.

# Q49. 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

**Correct Option: (c)** 

**Explanation:** 

#### Statement I: True.

In the absence of an atmosphere, Earth would quickly lose its heat — similar to the Moon — causing global temperatures to fall below freezing, except possibly at the equator during peak sunlight hours.

#### Statement II: True.

The atmosphere helps retain heat through the greenhouse effect, which keeps Earth's average temperature around 15°C instead of dropping to approximately -18°C.

#### Statement III: True.

Greenhouse gases such as carbon dioxide (CO<sub>2</sub>) and methane are effective at absorbing and retaining infrared radiation, making them key drivers of the greenhouse effect.

#### Conclusion:

All three statements are accurate.

# 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

**Correct Option: (c)** 

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**Explanation:** 

#### Statement I: True.

In rural India, small and marginal farmers as well as landless laborers typically rear indigenous cattle and animals with low milk yields. The Rashtriya Gokul Mission (RGM) seeks to enhance the productivity of these animals, which is essential for improving rural incomes and reducing poverty.

#### Statement II: True.

The Rashtriya Gokul Mission was initiated in 2014 as part of the National Programme for Bovine Breeding and Dairy Development. Its key goal is the scientific preservation and comprehensive development of native cattle and buffalo breeds.



#### Conclusion:

Both statements are correct.

# 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.

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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

# **Correct Option: (d)**

# **Explanation:**

- Statement I: Incorrect. Intermediate-level Panchayats (Panchayat Samitis) exist only in states with a population above 20 lakh, as per the 73rd Amendment (Article 243B). Smaller states like Goa or Sikkim may not have them.
- **Statement II**: Incorrect. The minimum age to be a member of any Panchayat (village, intermediate, or district) is 21 years, as per Article 243F, not 30.
- Statement III: Incorrect. The State Finance Commission, constituted by the Governor (not the Chief Minister), reviews the financial position of all Panchayats (not just intermediate) and recommends tax distribution (Article 243I).
- Conclusion: All three statements are incorrect.

# Q52. Consider the following statements in respect of BIMSTEC:

- I. It is a regional organization consisting or seven member states till January 2025.
- II. It came into existence with the signing of the Dhaka declaration, 1999.
- III. Bangladesh, india, sri lanks, Thailand and Nepal are founding member states of BIMSTEC.
- IV. In BIMSTEC, the subsector of 'tourism' is being led by india.

Which of the statements given above is/are correct?

a. I and II



- b. II and III
- c. I and IV
- d. I only

#### **Explanation:**

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) was founded on **6 June 1997** through the signing of the Bangkok Declaration. Therefore, **statement 2 is incorrect**.

Originally, the organization was known as **BIST-EC** (Bangladesh-India-Sri Lanka-Thailand Economic Cooperation). It later expanded to include Myanmar on **22 December 1997**, followed by Bhutan and Nepal in **February 2004**, at which point it was renamed **BIMSTEC**. On 6 June 1997, representatives from Bangladesh, India, Sri Lanka, and Thailand signed the declaration establishing BIST-EC. Thus, **statement 1 is correct**, and **statement 3 is incorrect**.

At its inception in 1997, BIMSTEC focused on six sectors: trade, technology, energy, transport, tourism, and fisheries. In 2008, it expanded to include agriculture, public health, poverty alleviation, counterterrorism, environment, culture, people-to-people contact, and climate change. The sectors were later rationalized and reorganized in 2021, assigning leadership roles to member countries as follows:

- Bangladesh: Trade, Investment, and Development
- Bhutan: Environment and Climate Change
- India: Security (including Counter-Terrorism, Transnational Crime, Disaster Management, Energy)
- Myanmar: Agriculture and Food Security (Agriculture, Fisheries, Livestock)
- Nepal: People-to-People Contact (Culture, Tourism, Forums like think tanks, media)
- Sri Lanka: Science, Technology & Innovation (Technology, Health, Human Resource Development)

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- Thailand: Connectivity

Nepal, as the lead country for Tourism, has circulated an updated draft "Plan of Action on Tourism" for discussion in upcoming sub-sector meetings.

Hence, statement 4 is incorrect.

# Q53. Who amongst the following are members of the Jury to select the recipient of 'Gandhi Peace Prize'?

- I. The president of india
- II. The prime minister of india
- III. The chief justice of india



IV. 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

**Correct Option: (c)** 

#### **Explanation:**

**Explanation:** The Jury for Gandhi Peace Prize is chaired by Prime Minister, ,and comprises two ex-officio members, namely the Chief Justice of India and Leader of the single largest Opposition Party in Lok Sabha.

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. II and III only
- c. I only
- d. I and II only

**Correct Option: (d)** 

# CPEATING LEADERS OF TOMORROW

#### **Explanation:**

- Statement 1 and 2 are correct: This is a Satellite Based Augmentation System (SBAS) implemented jointly with Airport Authority of India (AAI). The main objectives of GAGAN are to provide Satellite-based Navigation services with accuracy and integrity required for civil aviation applications and to provide better Air Traffic Management over Indian Airspace.
- **Statement 3 is incorrect:** GAGAN has been developed for aviation but it will provide benefits to other sectors as well like transportation, railways, surveying, maritime, highways, telecom industry, and security agencies.



# 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 US and UK also signed the declaration on inclusive and sustainable IA.

Which of the statements given above is/are correct?

- I. I only
- II. II only
- III. Both I and II
- IV. Neither I nor II

**Correct Option: (a)** 

# **Explanation:**

**Statement 1 is correct:** The event, co-chaired by India, builds upon progress made during the Bletchley Park Summit in November 2023 and the Seoul Summit in May 2024. It involves a steering committee composed of around 30 countries and international organizations to ensure broad and diverse participation.

VII S

**Statement 2 is incorrect:** The US and UK declined to endorse the Paris Summit declaration on 'inclusive' AI. However, the declaration was supported by 60 other countries, including France, China, India, Japan, Australia, and Canada.

#### Q56. Consider the following pairs:

1. International year of woman farmer : 2026

2. International year of sustainable and resilient tourism : 2027

3. International year of peace and trust : 2025

4. 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

**Correct Option: (d)** 

**Explanation:** 



**Option 1 is correct:** In May 2024, the United Nations General Assembly adopted a resolution—proposed by the United States—declaring 2026 as the International Year of the Woman Farmer by consensus.

**Option 2 is correct:** Proposed by Uzbekistan, the UN officially designated 2027 as the International Year of Sustainable and Resilient Tourism, emphasizing the significance of promoting sustainable tourism development.

**Option 3 is correct:** In March 2024, the UN General Assembly passed a resolution declaring 2025 as the International Year of Peace and Trust.

**Option 4 is correct:** Also in 2024, the General Assembly declared 2029 as the International Year of Asteroid Awareness and Planetary Defence, aiming to leverage the close approach of asteroid 99942 Apophis to increase global awareness about asteroids.

#### Q.57. Consider the following statements with regard to BRICS"

- I. 16<sup>th</sup> 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 16<sup>th</sup> BRICS summit was strengthening multiculturalism for just global development and security.

Which of the statement given above is/are correct?

- a. I and II
- b. II and III
- c. I and III
- d. I only

**Correct Option: (a)** 

#### **Explanation:**

**Statement 1 is correct:** The 16th BRICS Summit, which was the first summit with an expanded membership, was held in Kazan, Russia, from October 22 to 24, 2024, with Russia serving as the chair.

**Statement 2 is correct:** Indonesia officially joined BRICS as the first Southeast Asian member. This was announced by Brazil, the BRICS presidency holder for 2025, and Indonesia's membership was endorsed by BRICS leaders during the 2023 Johannesburg summit.

**Statement 3 is incorrect:** The actual theme of the summit was "Strengthening Multilateralism for Just Global Development and Security," not "multiculturalism."

#### Q.58 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 the chief justice of india, whether incumbent or retired, has to be its chair person.
- 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

Correct Option: (a)

#### **Explanation:**

**Statement 1 is incorrect:** The Lokpal and Lokayuktas Act, 2013 applies throughout India and covers public servants both within and outside the country.

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**Statement 2 is incorrect:** The Act states that the Chairperson or Members should be individuals who are or have been Chief Justice of India or Judges of the Supreme Court.

**Statement 3 is correct:** According to Section 3 of the Lokpal and Lokayuktas Act, 2013, the Chairperson or a Member must be at least 45 years old at the time of assuming office.

**Statement 4 is incorrect:** As per Section 14 of the Act, complaints can be filed against any person who is or has been the Prime Minister.

#### 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 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 given above is/are correct?

- a. I only
- b. II and III only
- c. I and III only
- d. I, II and III



### **Explanation:**

- Statement 1 is correct: The Kho Kho World Cup 2025 was held at the Indira Gandhi Indoor Stadium in New Delhi from January 13 to 19, 2025.
- **Statement 2 is incorrect:** The Indian men's kho kho team beat Nepal 54-36 in the final.
- **Statement 3 is incorrect:** The women's team won 78-40 against the same opponents.

# **Q60.** Consider the following statements:

- ١. In the finals of the 45<sup>th</sup> chess Olympiad held in 2024, Gukesh Dommaraju became the world's youngest winner after defeating the Russian player Jan Nepominiachtchi.
- II. Abhimanyu Mishra, an American chess player, holds the records 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

# **Correct Option: (b)**

### **Explanation:**

- Statement 1 is incorrect: India's Gukesh Dommaraju became the world's youngest chess champion after defeating China's Ding Liren in the final match of their series in Singapore.
- Statement 2 is correct: Abhimanyu Mishra is the world's youngest chess grandmaster. His home country is the USA. He broke the record that had stood for 19 years.

# LEADERS OF TOMOR 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 in respect of the above staatemens:

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.

#### **Explanation:**

**Statement I is correct:** Rare-earth elements (REEs) are essential components in many advanced technologies such as smartphones, digital cameras, computer hard drives, LED lights, flat-screen TVs, monitors, and other electronic displays. They are also heavily used in clean energy and defense sectors.

**Statement II is correct:** Certain rare-earth metals possess unique optical characteristics like fluorescence and phosphorescence, which are crucial for applications in lighting, display technologies, and medical imaging.

Because of these distinct optical properties, rare-earth elements play a key role in various high-tech and medical applications.

# 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 system developed in collaboration with Germany.
- III. 'Kavach' system consists of RFID tags fitted on track in station section.

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

Correct Option: (a)

# **Explanation:**

**Statement 1 is incorrect:** Indian Railways has developed the National Rail Plan (NRP) for India – 2030, aiming to build a 'future-ready' railway network by 2030.

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**Statement 2 is incorrect:** Kavach is an indigenous Automatic Train Protection (ATP) system that is highly advanced and requires the highest level of safety certification (SIL-4).

**Statement 3 is correct:** The implementation of the Kavach system includes key activities such as:

• Installing Station Kavach units at every station and block section,



- Placing RFID tags along the entire track,
- Setting up telecom towers throughout the railway sections.

# Q63. Consider the following space missions:

- 1. Axiom-4
- 2. SpaDex
- 3. Gaganyaan

How many of the space missions given above encourage and support micro-gravity research?

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

Correct Option: (c)

**Explanation:** 

Statement 1 is correct: According to ISRO's official announcement, seven Indian microgravity experiments will be conducted aboard the International Space Station during the Axiom-4 mission.

Statement 2 is correct: The SpaDeX mission is an affordable technology demonstrator designed to showcase in-space docking using two small spacecraft launched by PSLV. It also offers the scientific community the chance to perform certain microgravity experiments in orbit for up to three months.

Statement 3 is correct: ISRO has recently signed a new agreement to advance space medicine research supporting the Gaganyaan mission. This collaboration aims to strengthen ISRO's human spaceflight program by promoting research and innovation in human health, microgravity, space medicine, and space biology.

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

Aircraft type

Description

LEADERS OF TOMOR 1. Dornier-228

2. IL-76 Supersonic combat aircraft

3. C-17 Globe-master III Military transport aircraft

How many of the pairs given above are correctly matched?

- a. Only one
- b. Only two
- c. All the three



d. None

**Correct Option: (b)** 

#### **Explanation:**

**Option 1 (Dornier-228) is correct:** This aircraft was specifically developed to address diverse needs such as utility and commuter transport, third-level services, air-taxi operations, coast guard missions, and maritime surveillance.

**Option 2 (IL-76) is incorrect:** The IL-76 is a tactical fixed-wing transport aircraft with four turbofan engines, designed by the Ilyushin Design Bureau in the Soviet Union. It was intended to carry heavy equipment to remote or conflict areas. However, it is not supersonic, as its top speed in level flight is about 528 mph (850 km/h), while supersonic aircraft typically exceed speeds of 750 mph.

**Option 3 (C-17 Globemaster III) is correct:** The C-17 is a high-wing, four-engine military transport plane with a T-tail, capable of delivering large cargo, supplies, and troops directly to small and rough airfields worldwide.

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 nitrated and potassium chloride

**Correct Option: (a)** 

# **Explanation:**

Cloud seeding creates artificial rain by injecting substances such as silver iodide, potassium iodide, dry ice (solid carbon dioxide), liquid propane, or salt into clouds to induce precipitation. By dispersing these substances the processes within the cloud are altered and precipitation can be improved.

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. I only
- b. II only
- c. Both I and II
- d. Neither I nor II



#### **Explanation:**

**Statement 1 is correct:** The Supreme Court has the authority to limit the pardoning powers of the President and Governors through judicial interpretation and an activist approach.

**Statement 2 is incorrect:** In the notable case of *Maru Ram v. Union of India*, the Supreme Court clearly ruled that the President cannot act on personal discretion in this matter; instead, the President must act based on the aid and advice of the Council of Ministers.

#### 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, provide that no resolution shall be moved unless at least fourteen days' notice has been given of the intention to move the resolution.

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

**Correct Option: (c)** 

#### **Explanation:**

**Statement 1 is correct:** When the Lok Sabha (House of the People) is dissolved, the Speaker remains in office until just before the first meeting of the new Lok Sabha following the dissolution.

**Statement 2 is incorrect:** According to Article 94, a Speaker or Deputy Speaker must vacate their office if they cease to be a member of the Lok Sabha, can resign by writing to the other office-holder, and can be removed by a majority resolution of the House. However, there is no provision about resignation from political parties affecting their office.

**Statement 3 is correct:** Any resolution to remove the Speaker or Deputy Speaker must be preceded by at least fourteen days' notice before it is moved.

# Q68. Consider the following statements:



- If any question arises as to whether a member of the house of the people has become subject to disqualification under the 10<sup>th</sup> 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

**Correct Option: (d)** 

#### **Explanation:**

#### Statement I is incorrect:

The authority to decide whether a Member of the Lok Sabha or Rajya Sabha has incurred disqualification under the Tenth Schedule (Anti-Defection Law) lies with the Speaker or Chairman, **not** the President. The Speaker's or Chairman's decision is final within the context of the Tenth Schedule, but the Supreme Court in *Kihoto Hollohan v. Zachillhu* (1992) clarified that such decisions can be subject to judicial review on grounds like mala fide or violation of constitutional principles. The President's role in disqualification matters applies only under Article 102, and even then, only after receiving the Election Commission's opinion—not on the advice of the Council of Ministers.

### Statement II is incorrect:

While the original 1950 Constitution did not contain the term "political party," it was explicitly introduced by the 52nd Amendment Act (1985) through the insertion of the Tenth Schedule, which deals with disqualification due to defection. The Schedule uses the term "political party" multiple times, clearly defining it within the constitutional framework. Hence, the Constitution does currently contain the term "political party."

#### Q69. Consider the following statements:

#### Statements 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.

#### Statements 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 Statement II are correct and statement II explains statement I
- b. Both statement I and Statement II are correct but 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

**Explanation:** 

#### Statement 1 is incorrect:

Under Section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act), **State Governments have the power to make rules** regarding the grant of concessions for the extraction of minor minerals and the levy and collection of royalty on them, **but this power is not absolute or complete**. The central government also has certain overriding powers in the regulation of minerals, especially for major minerals and in specific cases under the Act.

#### Statement 2 is correct:

The Central Government has the authority to notify what constitutes "minor minerals" under Section 3(e) of the MMDR Act, 1957. This notification defines the scope of minor minerals subject to state regulation.

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 organization for economic cooperation and development
- d. The food and agriculture organization

Correct Option: (a)

#### **Explanation:**

The <u>Nature Restoration Regulation</u> is the first continent-wide, comprehensive law of its kind. It is a key element of **the <u>EU Biodiversity Strategy</u>**, 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.

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

- I. Revenue deficit is Rs. 20,000 crores.
- II. Fiscal deficit is Rs. 10,000 crores.
- III. Primary deficit is Rs. 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

#### **Explanation:**

Statement 1 is correct: Revenue Deficit = Revenue Expenditure – Revenue Receipts (80,000 crore -60,000 crore = 20,000)

Statement 2 is correct: Fiscal Deficit; The Government budget shows borrowing of Rs 10,000 crore

Statement 3 is correct: Primary Deficit: Fiscal Deficit – Interest Payment (10,000 crore - 6,000 crore = 4,000 crore)

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

Correct Option: (a)

#### **Explanation:**

The INSTC envisages the movement of goods from Mumbai (India) to Shahid Beheshti Port – Chabahar (Iran) by sea, from Chabahar to Bandar-e- Anzali (an Iranian port on the Caspian Sea) by road, and then from Bandar-e- Anzali to Astrakhan (a Caspian port in the Russian Federation) by ship across the Caspian Sea, and after that from Astrakhan to other regions of the Russian Federation and further into Europe by Russian railways were highlighted by the speakers during the workshop.

#### 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 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 statements 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.

# **Explanation:**

#### Statement 1 is incorrect:

The United States is the **leading producer of fuel ethanol** in the world. In 2024, the U.S. produced an estimated **16.1 billion gallons** of ethanol. Although Brazil is a major ethanol producer, it produces **less ethanol than the United States**.

#### Statement 2 is correct:

**Sugarcane** is the primary raw material for ethanol production in Brazil, making it a leader in sugarcane-based ethanol. In contrast, the United States uses **corn** as the primary feedstock for ethanol production, producing blends like E10, E15, and E85.

Q74. The World Bank warned that India could become one of the first places where wetbulb temperatures routinely exceed 35°C. Which of the following statements best reflects(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

**Correct Option: (c)** 

#### **Explanation:**

#### Statement 1 is correct:

According to the World Bank, **Peninsular India is highly vulnerable to climate risks such as flooding, tropical cyclones, and droughts**, which pose serious threats to life, infrastructure, and the economy.

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#### Statement 2 is correct:

A wet-bulb temperature of 35°C is a critical threshold. At or above this level, the human body cannot effectively cool itself through sweating, which may lead to heatstroke and even



death. This extreme heat stress poses a grave risk to both humans and animals in affected regions.

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

- a. 48,500 crores
- b. 51,500 crores
- c. 58,500 crores
- d. None of the above

Correct Option: (a)

#### **Explanation:**

Gross Primary Deficit = Fiscal Deficit (Rs 50,000 crore) – Interest Payments (Rs 1,500 crore) = Rs **48,500 crore** 

#### **Supplementary Notes**

A primary deficit is the difference between what a government earns (not counting interest payments) and what it spends on non-interest items. It shows how well a government is managing its finances, indicating how much it borrows to pay for daily operations instead of using its own money. A primary deficit can point to poor financial practices, as it means the government is using debt for everyday costs instead of focusing on long-term growth or paying off existing debts.

Q76. Which of the following statements with regard to recommendations of the 15<sup>th</sup> 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.

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

**Correct Option: (c)** 

**Explanation:** 



#### Statement 1 is correct:

The Finance Commission has recommended grants totaling **Rs.4,800 crore (Rs.1,200 crore annually from 2022-23 to 2025-26)** to incentivize States to improve educational outcomes.

#### Statement 2 is incorrect:

The Commission did **not** recommend that 41% of the net proceeds of Union taxes be shared with States. This figure differs from the actual recommended percentage, which is generally lower (for example, the 15th Finance Commission recommended 42%, but this varies per commission).

#### Statement 3 is correct:

The Commission has recommended an incentive fund of **Rs.45,000 crore** as performance-based grants to encourage States to implement agricultural reforms during the award period.

### Statement 4 is correct:

The Finance Commission has **reintroduced the tax effort criterion** to reward States based on their fiscal performance and revenue mobilization efforts.

# 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 proverty.
- III. It was established to help Europe rebuild after the 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

**Correct Option: (c)** 

**Explanation:** 

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#### Statement 1 is correct:

The International Bank for Reconstruction and Development (IBRD) is owned by 189 member countries and is the largest development bank globally. It supports the World Bank Group by providing loans, guarantees, risk management products, and advisory services to middle-income and creditworthy low-income countries. It also coordinates responses to regional and global challenges.

#### Statement 2 is incorrect:

While **IBRD** and the International Development Association (IDA) together constitute the World Bank, the statement as given is incomplete or misleading. IBRD and IDA are separate entities within the World Bank Group with distinct roles: IBRD primarily lends to middle-income and creditworthy low-income countries, while IDA provides concessional loans and grants to



the poorest countries. They do work closely with other World Bank Group institutions and partners but are not synonymous or simply "joined" as one entity.

#### Statement 3 is correct:

The IBRD was created in 1944 primarily to help rebuild Europe after World War II.

#### 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
- c. I and III
- d. III only

**Correct Option: (a)** 

## **Explanation:**

#### Statement I is correct:

RTGS stands for **Real Time Gross Settlement**. It is a system where fund transfers are settled **individually and continuously in real time**, without netting or batching. In contrast, NEFT (National Electronic Funds Transfer) processes transactions in batches at specific intervals. Hence, RTGS processes transactions on a transaction-by-transaction basis throughout the day.

#### Statement II is not correct:

Regarding charges for RTGS transactions, the Reserve Bank of India (RBI) has mandated that:

- Inward RTGS transactions are free of charge (no fee to the beneficiary).
- Outward RTGS transactions charges vary, but the specific limits mentioned here (₹25 for ₹2,00,000 to ₹5,00,000 and ₹50 for above ₹5,00,000) are outdated or incorrect as per the latest RBI guidelines. RBI has rationalized charges over time, and many banks have waived or altered these fees to encourage digital payments. Thus, the detailed fee structure in the statement is not currently accurate.

#### Statement III is not correct:

RTGS was made **available 24x7x365 starting from December 14, 2020**, so this statement claiming it is not correct is actually incorrect — RTGS *is* available round-the-clock since that date.



So, **only Statement I is correct**; Statements II and III are not correct as per the current status and RBI guidelines.

### Q79. Consider the following countries:

- 1. United arab emirates
- 2. France
- 3. Germany
- 4. Singapore
- 5. 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

# **Correct Option: (b)**

### **Explanation:**

Exp: India's digital payments movement is gaining global attention, with UPI and RuPay expanding across borders. UPI is now operational in seven countries: UAE, Singapore, Bhutan, Nepal, Sri Lanka, France, and Mauritius.

# 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

#### **Correct Option: (d)**



**PM Surya Ghar: Muft Bijli Yojana** is the world's largest domestic rooftop solar initiative, aiming to **provide solar power to one crore (10 million) households by March 2027**. This is a massive step toward transforming India's renewable energy landscape by increasing solar adoption at the household level.

The **Ministry of New and Renewable Energy (MNRE)** plans to impart training on the **installation, operation, maintenance, and repair of rooftop solar systems at the grassroots level** to ensure effective deployment and sustainability of the program.

Under the scheme's **capacity-building component**, the goal is to create **over 3 lakh (300,000) skilled manpower** through fresh skill development and up-skilling programs. Out of these, **at least 1,00,000 will be trained as Solar PV Technicians**, a critical workforce to support the growing rooftop solar infrastructure.

This scheme highlights India's focus on clean energy adoption combined with creating skilled employment opportunities in the renewable energy sector.

# 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 cororect?

- a. I and II only
- b. II and III only
- c. I and III only
- d. I, II and III

**Correct Option: (c)** 

#### **Explanation:**

#### Statement I is correct:

An ordinance promulgated under **Article 123 (President)** or **Article 213 (Governor)** holds the same force and effect as an Act of Parliament or State Legislature. It can amend or repeal existing laws, within the bounds of constitutional provisions and the respective legislature's competence.

# • Statement II is incorrect:

Since ordinances are considered "law" under **Article 13**, they must conform to the Fundamental Rights enshrined in Part III of the Constitution. **Article 13(2)** prohibits the State from making laws that abridge Fundamental Rights. Therefore, an ordinance cannot violate Fundamental Rights.

#### • Statement III is correct:

Legislative power, whether exercised through an Act or an Ordinance, generally includes the power to enact **retrospective laws** (except for criminal laws due to **Article** 



**20(1)**, which prohibits retrospective criminal penalties). The Supreme Court has affirmed that the ordinance-making power is **co-extensive with legislative power**, including the power of retrospective legislation.

# Q82. Consider the following pairs:

# State Description

- 1. Arunachal Pradesh: The capital in named after a fort, and the State has two national parks
- 2. Nagaland : The state came into existence on the basis of a constitutional amendment act
- 3. Tripura : Initially a part 'C' State, it became a centrally administered territory with the reorganization of states in 1956 and later attained the status of a full-fledged state

How many of the above pairs are correctly matched?

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

Correct Option: (b)

### Explanation:

- Pair 1 (Ita Fort and Arunachal Pradesh National Parks) is correctly matched:
   Ita Fort, located in Itanagar, Arunachal Pradesh, literally means "Fort of bricks" (with "Ita" meaning brick in Assamese). Itanagar, the capital of Arunachal Pradesh, derives its name from this fort. Arunachal Pradesh is home to two national parks: Namdapha National Park and Mouling National Park.
- Pair 2 (Nagaland and Article 371A) is incorrectly matched:
   Nagaland became a state through the State of Nagaland Act, 1962. Simultaneously, the Constitution (Thirteenth Amendment) Act, 1962 introduced Article 371A, granting special status to Nagaland. This article safeguards Nagaland's unique religious, social, customary, and land-related practices from interference by the Indian Parliament without the consent of Nagaland's Legislative Assembly. The pair may be incorrect if the matching context doesn't align with these facts or if it misrepresents Article 371A.
- Pair 3 (Tripura's merger and statehood) is correctly matched:
   Tripura's royal history ended when it acceded to the Indian Union on October 15, 1949, becoming a Part 'C' state. In November 1956, during state reorganization, it became a Union Territory with an Advisory Committee. The Tripura Territorial Council was dissolved on July 1, 1963, and a Legislative Assembly was formed. Tripura was granted full statehood on January 21, 1972, under the North Eastern Areas (Reorganisation) Act, 1971.



# Q83. With reference to India consider the following:

- 1. The inter-state council
- 2. The national security council
- 3. 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 the three
- d. None

**Correct Option: (a)** 

# **Explanation:**

• Inter-State Council:

Established under **Article 263** of the Constitution of India, the Inter-State Council is a **constitutional body** aimed at promoting coordination and cooperation between the States and between the Centre and the States. Therefore, **option I is correct**.

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National Security Council (NSC):

The NSC was created by an executive order of the Government of India and has no mention in the Constitution. It functions as an executive body, not a constitutional one. Hence, option II is not correct.

Zonal Councils:

Zonal Councils were constituted under the **States Reorganisation Act**, **1956**, which is a statute enacted by Parliament. Since they are not established by any constitutional provision, they are classified as **statutory bodies**, not constitutional bodies. Therefore, **option III is not correct**.

#### Q84. Consider the following statements:

- The constitution of india explicitly mentions that in certain spheres the governor of a state acts in his/her own, discretion.
- II. The president of india can, of his/her own, reserve a bill passed by a state legislature for his/her consideration without it being forwarded by the governor of the state concerned.

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

**Correct Option: (c)** 



#### **Explanation:**

#### • Statement I:

Article **163(1)** provides for a Council of Ministers to aid and advise the Governor except in matters where the Governor is required by the Constitution to act at his/her discretion. Article **163(2)** states that if there is any question whether a matter falls within the Governor's discretionary powers, the Governor's decision is **final**. Thus, the Constitution explicitly recognizes the Governor's discretionary powers. **Statement I is correct.** 

#### Statement II:

Article **200** empowers the Governor to reserve certain bills passed by the State Legislature for the President's consideration. However, the President cannot **suo motu** take up any State bill unless it has been first **reserved and forwarded by the Governor**. Therefore, **Statement II is not correct.** 

# Q85. Consider the following pairs:

Provision in the Constitution of India : Stated under

I. Separation of Judiciary from the Executive in the public services of the State: The Directive Principles of the State Policy

II. Valuing and preserving of the rich heritage of our composite culture : The Fundamental Duties

III. Prohibition of employment of children below the age of 14 years in factories : The Fundamental Rights

How many of the above pairs are correctly matched?

a. Only one

b. Only two

c. All the three

d. None

**Correct Option: (c)** 

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#### **Explanation:**

# Article 50:

This Directive Principle of State Policy mandates the State to take steps for the **separation of the judiciary from the executive** in the public services of the State. This separation is essential to ensure an independent judiciary and maintain the rule of law.

#### • Fundamental Duties (Article 51A(f)):

It is the fundamental duty of every citizen of India to **value and preserve the rich heritage of our composite culture**. This duty emphasizes respect for India's diverse cultural traditions and promotes national integration.



#### Article 24:

This Article prohibits the **employment of children below 14 years of age** in factories, mines, or any hazardous employment, aiming to protect children from exploitation and ensure their health and development.

# Q86. Consider the following statements:

- I. With reference to the Constitution of India, if an area in a State is declared as Scheduled Area under the Fifth Schedule
- II. The state government loses its executive power in such areas and a local body assumes total administration
- III. The union government can take over the total administration of such areas under certain circum-stances on the recommendations of the governor

Which of the statements given above is/are correct?

- 1. I only
- 2. II only
- 3. Both I and II
- 4. Neither I and II

Correct Option: (d)

Explanation:

#### Statement I:

The claim that the State Government loses its executive power in Scheduled Areas and that a local body assumes total administration is **incorrect**.

- Paragraph 2 of the Fifth Schedule clearly states that the executive power of the State Government extends to Scheduled Areas.
- The Governor has special powers, such as modifying laws (Paragraph 5) and constituting a Tribes Advisory Council (Paragraph 4), but these powers do not nullify the authority of the State Government.
- Even under the PESA Act (1996), which strengthens Gram Sabhas and local selfgovernment in Scheduled Areas, the State Government continues to exercise executive functions within the framework of the Fifth Schedule.

# Statement II:

The Union Government **cannot take over total administration** of Scheduled Areas solely based on recommendations by the Governor under the Fifth Schedule.

- Paragraph 3 of the Fifth Schedule allows the Union Government to issue directions
  to the State Government regarding administration but does not empower it to assume
  total control.
- A complete takeover of administration can only occur through **Article 356 (President's Rule)**, which is a distinct constitutional provision unrelated to the Fifth Schedule.



#### **Summary:**

- The State Government retains executive power in Scheduled Areas, supported by the special powers of the Governor.
- The Union Government's role is supervisory via directions, **not direct takeover**, unless Article 356 is invoked.

# Q87. With reference of 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

How many of the above pairs are correctly matched?

a. Only one

b. Only two

c. All the three

d. None

**Correct Option: (d)** 

#### **Explanation:**

### **National Automotive Board (NAB):**

- NAB is an autonomous society functioning under the Department of Heavy Industry, which is part of the Ministry of Heavy Industry & Public Enterprises, Government of India.
- The **Chairman of NAB** is typically selected by the government or the governing body of the board to lead its initiatives related to the automotive sector.

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#### **Coir Board:**

- The Coir Board is an organization that comes under the Ministry of Micro, Small and Medium Enterprises (MSME), Government of India.
- It works to promote the coir industry and products across India and abroad.

# **National Centre for Trade Information (NCTI):**

- NCTI has been established by the Ministry of Commerce and Industry, Government of India.
- Its main role is to create a systematic mechanism for the **collection and dissemination of trade data** and to improve business information services for stakeholders.



#### **Additional Info:**

 Shri Bhanu Pratap Singh Verma recently laid the foundation stone for a Coir Showroom at Konch, Jalaun District, Uttar Pradesh, which highlights efforts to promote coir products locally.

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

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

For a constitutional amendment with respect to which of the above, ratification by the Legislatures or not less than one-half of the States is required before presenting the bill to the president of india for assent?

- a. I and II only
- b. II and III only
- c. I and III only
- d. I, II and III

# **Correct Option: (a)**

#### **Explanation:**

- 1. Amendment of the Union List (List I) in the Seventh Schedule:
  - The Union List defines subjects on which only the Union Parliament can legislate.
  - Any amendment to the Union List or other provisions affecting the federal structure requires:
    - A special majority in Parliament (i.e., two-thirds of members present and voting and a majority of the total membership), and
    - The consent of at least half of the State Legislatures (Article 368(2)).
  - This ensures that states have a say in changes that affect the distribution of powers between the Centre and the States.

#### 2. Amendment of the Conditions of the Governor's Office:

- o The Governor's conditions of office, including their tenure, salary, and allowances, are governed by **Article 158** and related provisions.
- Parliament can amend these conditions by passing an ordinary law under its legislative powers.
- 3. Extent of Executive Power of a State:



- Changes to the extent of executive power of a state (i.e., the powers exercisable by the Governor and the State Government) require:
  - A special majority in Parliament,
  - Along with the consent of at least half of the State Legislatures,
  - But the amendment is passed by simple majority in each State Legislature consenting to the change.

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

- I. The governor of a state 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 within the house.

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

**Correct Option: (d)** 

# **Explanation:**

#### Statement I:

The Governor of a State is not answerable to any court for the exercise and performance of the powers and duties of their office.

- Under **Article 361(1)** of the Constitution, the Governor enjoys personal immunity from any judicial scrutiny regarding official acts done in the exercise of their constitutional functions.
- This immunity ensures that the Governor can perform their constitutional role without fear of personal litigation.
- However, this does not mean the government's actions are beyond judicial review; only the Governor's personal responsibility is protected.
- Hence, Statement I is correct.

#### Statement II:

No criminal proceedings shall be instituted or continued against the Governor during their term of office.



- Article 361(2) explicitly protects the Governor from any criminal proceedings during their tenure.
- This immunity preserves the dignity and uninterrupted functioning of the Governor's constitutional office.
- Hence, Statement II is correct.

#### Statement III:

Members of a State Legislature are not liable to any proceedings in any court in respect of anything said within the House.

- According to Article 194(2), members of the State Legislature enjoy complete freedom
  of speech and debates within the House and its committees.
- This immunity ensures legislators can express their views freely without fear of legal consequences, thus promoting free and uninhibited legislative debate.
- Hence, Statement III is correct.

# Q90. Consider the following activities:

- 1. Production of crude oil
- 2. Refining, storage and distribution of petroleum
- 3. Marketing and sale of petroleum products
- 4. Production of natural gas

How many of the above activities are regulated by the petroleum and natural gas regulatory board in our country?

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

**Correct Option: (b)** 

# **Explanation:**

The **Petroleum and Natural Gas Regulatory Board (PNGRB)** was established under **The Petroleum and Natural Gas Regulatory Board Act, 2006**, which was notified via the Gazette on 31st March 2006.

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The Act provides for the establishment of the PNGRB with the primary objectives to:

- Protect the interests of consumers and entities engaged in specified activities related to petroleum, petroleum products, and natural gas.
- Promote competitive markets in the petroleum and natural gas sector.



- Regulate refining, processing, storage, transportation, distribution, marketing, and sale
  of petroleum, petroleum products, and natural gas excluding the production of crude
  oil and natural gas.
- Ensure uninterrupted and adequate supply of petroleum, petroleum products, and natural gas throughout the country.

Thus, the board focuses on downstream activities, leaving upstream production outside its regulatory scope.

Hence, option (b) is the correct answer.

# 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

Correct Option: (b)

#### **Explanation:**

The statement "Sedition has become my religion" was famously made by Mahatma Gandhi at the time of his involvement in the Non-Cooperation Movement (NCM) and other antigovernment protests. In 1922, Gandhi was charged with sedition for his actions. He also declared that British rule in India was a curse and he was determined to destroy the system of government, viewing this act of resistance as his religion.

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

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a. Carnelian

b. Clay

c. Bronze

d. Gold

**Correct Option: (c)** 

#### **Explanation:**

This mesmerizing sculpture, famously known as 'The Dancing Girl,' is one of the highest achievements of the artists of Mohenjodaro. The 'Dancing Girl' is a sculpture made of bronze. It belongs to the Indus Valley Civilization and dates back to circa 2500 BCE. It is 10.5 cm in height, 5 cm in width and 2.5 cm in depth. Presently, it is on display in the Indus Valley Civilization gallery in the National Museum, New Delhi.



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

- a. R. Das
- b. Madan Mohan Malaviya and Krishna Kant
- c. Saifuddin Kitchlew and Khwaja Hasan Nizami
- d. A. Jinnah

# **Correct Option: (b)**

#### **Explanation:**

In 1909, **Madan Mohan Malaviya**, who was a lawyer by profession, became the president of the Indian National Congress. Later, in 1918, he was elected to the **Municipal Corporation of Allahabad** and subsequently to the **Provincial Legislative Council**, where he served for nearly thirty years.

Malaviya was a strong advocate for **women's education** and opposed social evils like the **dowry system**. One of his most notable achievements was founding **Banaras Hindu University** (**BHU**) in 1916. He secured a significant donation for the university from the then **Nizam of Hyderabad**, despite the Nizam's reputation for being tight-fisted.

Though Malaviya had left his legal practice to focus on politics, he returned to defend those accused in the **Chauri Chaura incident of 1919**. This incident led to trials of 225 individuals charged with rioting and arson. The trial at Gorakhpur Sessions Court lasted eight months. Initially, 172 were sentenced to death, but Malaviya's defense efforts led to the acquittal of 153 people, significantly reducing the number of those facing capital punishment.

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 Agreement (Delhi Pact)
- c. Arrest of Congress leadership at the time of the quit india movement
- d. Promulgation of the government of india act, 1935

#### Correct Option: (a)

### **Explanation:**

The **Poona Pact** was signed on **24th September 1932** between **Dr. B.R. Ambedkar** and **Mahatma Gandhi** at Yerwada Central Jail in Pune. It was a compromise between Gandhi's social approach and Ambedkar's political approach toward the upliftment of the "Untouchables," now referred to as the depressed classes.

Following the pact, on **25th September 1932**, a public meeting of Hindus was held to endorse the agreement. Gandhi felt there was a need for an organization dedicated to the welfare of the Untouchables. Consequently, on **28th September 1932**, the **All India Anti-Untouchability** 



**League** was formed, later renamed as the **Harijan Sevak Sangh** by Gandhi. The term **"Harijan"** means "children of God," but the Untouchables rejected this label as it implied pity and did not eliminate their social stigma.

#### **Key points of the Poona Pact:**

- It provided for a **joint electorate** with candidates from the depressed classes being elected by all voters, replacing the earlier system of separate electorates.
- **147 legislative seats** were reserved for the depressed classes, nearly twice the number originally proposed in the Communal Award.
- The pact guaranteed **fair representation** of the depressed classes in public services and allotted funds to promote their education and social advancement.
- Higher-caste Hindus publicly recognized the unfair treatment faced by the depressed classes.
- It emphasized the need for **swift and effective measures** to politically uplift the depressed classes.
- The pact made the whole country morally responsible for the welfare and progress of the underprivileged groups.

# Q95. Consider the following fruits:

- 1. Papaya
- 2. Pineapple
- 3. 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

**Correct Option: (c)** 

# **Explanation:**

#### Introduction of American Food Crops to India by the Portuguese

• After the **European 'discovery' of America**, American food crops spread worldwide.

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• The **Portuguese**, the earliest Europeans to arrive in India, introduced several American crops such as **maize**, **sweet potato**, **and capsicum**.



They also brought many New World fruits to India, including pineapple, papaya, sapodilla, and guava, which became part of Indian food culture.

#### **Pineapple**

- Originally from the Americas, the pineapple was brought to India by the Portuguese from **Brazil** during the 16th century.
- The Dutch traveler **Linschoeten** (1580s) noted the introduction of pineapple to India.
- Initially, pineapple was expensive, but widespread cultivation lowered its price.
- The famous historian Abul Fazl mentioned pineapple in Ain-i-Akbari (1590s) as a 'sweet' fruit.
- Abul Fazl described pineapple as similar in color and shape to an oblong orange, and in taste and smell to a mango.
- Pineapples were called Kathal-i-Safari (Jackfruit for travels), since young plants could be easily transported during travel.

#### **Papaya**

- Papaya came to India via the **Philippines and Malacca**, according to Linschoeten.
- It was initially popular but soon lost novelty.
- Absence of papaya in Abul Fazl's Ain-i-Akbari suggests it was not present in North India by the late 16th century.
- The Italian traveler Pietro Della Valle in 1623 encountered papaya in Portuguese Daman, describing it as sweet and somewhat resembling European melons.

#### Guava

- Guava is **native to Central America**.

  It was introduced to India by Portuguese traders in the early 17th century.

#### Q96. Consider the following countries:

- 1. United Kingdom
- 2. Denmark
- 3. New Zealand
- 4. Australia
- 5. Brazil

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



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

#### **Time Zones in Various Countries and Territories**

- United Kingdom (UK):
  - Mainland UK uses 1 time zone.
  - Including overseas territories (Bermuda, British Virgin Islands, Falkland Islands, Pitcairn Islands, etc.), the UK spans 9 time zones.

#### Denmark:

- Mainland Denmark uses 1 time zone (Central European Summer Time).
- Faroe Islands (1 time zone) and Greenland (3 time zones), part of the Danish realm, bring Denmark's total to **more than 4 time zones**.

#### New Zealand:

- North Island and South Island share 1 time zone.
- Chatham Islands have a unique time zone, 45 minutes ahead
- Tokelau (dependency) adds another time zone.
- o Total time zones: 3.

# Australia:

- Mainland states/territories have 5 standard time zones.
- Only 3 DST time zones because some states don't observe DST.
- o Including 3 dependencies, Australia spans 9 time zones.

### Brazil:

Has 4 standard time zones: Acre Time (ACT), Amazon Time (AMT), Brasília Time (BRT), and Fernando de Noronha Time (FNT).

# **Key Answer**

• Among the options given, **Brazil has 4 time zones** — hence **option (c) is correct**.

#### Q97. Consider the following statements:



- 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 None.

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

# **Correct Option: (a)**

# **Explanation on Time Difference between Anadyr and Nome**

- Time difference: Anadyr (Russia) and Nome (Alaska, USA) have a 20-hour time difference, with Nome being 20 hours behind Anadyr.
- Implication: Because of this large time gap, when people in Anadyr are waking up and having breakfast, it is still the previous day in Nome. This means they are effectively living on different calendar days at the same moment.
- **Statement I:** This is **correct** the two cities are on different days during morning hours due to the time difference.

# About the International Date Line (IDL):

- The IDL runs roughly along the middle of the Pacific Ocean from pole to pole.
- Crossing the IDL:
  - Traveling westward → you gain a day (date advances).
  - Traveling eastward → you lose a day (date goes back).
- Geographical positioning:
- Alaska (including Nome) is west of the IDL.
  Anadyr (Russia) !!
- Therefore, when it is **Monday in Anadyr**, it is **Sunday in Nome**, not Tuesday.
- **Statement II:** This is **incorrect** because the day difference is one day, not two.

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

- a. 'Periyar' E.V. Ramaswamy Naicker
- b. B.R. Ambedkar



- c. Bhaskarrao Jadhav
- d. Dinkarrao Javalkar

# **E.V. Ramasamy Periyar (1879–1973)**

- Known as the **father of the Dravidian movement**, Periyar was a radical social reformer and politician from Tamil Nadu.
- He strongly opposed the caste system and Brahminical dominance in society.
- Advocated for the rights and dignity of non-Brahmins and women.
- A staunch atheist, he challenged religious orthodoxy and superstition.
- In 1925, he founded the **Self-Respect Movement** to promote social equality, rationalism, and empowerment of the Dravidian people.
- His ideas greatly influenced the rise of **Dravidian political parties** which have played a major role in Tamil Nadu's politics ever since.

# 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

**Correct Option: (c)** 

# **Botswana:**

- One of the world's largest diamond producers.
- Diamonds contribute about 30% of its GDP and 80% of its exports.
- Recently, Botswana's mines yielded the **second-largest diamond in the world**, a rough **2,492-carat stone**, discovered by the Canadian company Lucara Diamond.

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#### **South America's Lithium Triangle:**

• Includes parts of Bolivia, Argentina, and Chile.



- Chile is a major supplier of copper (world's largest) and the second-largest producer of lithium.
- These minerals are crucial for **electric vehicle batteries** and **renewable energy systems** amid the global shift away from fossil fuels.

# **India's Mineral Exploration Efforts:**

- Indian state firms National Aluminium Company, Hindustan Copper, and Mineral Exploration and Consultancy formed **Khanij Bidesh India Limited (KABIL)**.
- KABIL's goal is to explore and acquire overseas mineral assets.

#### Indonesia:

- Holds the world's largest nickel reserves, accounting for nearly 30% of global supply.
- It is also the largest producer of nickel worldwide.

# 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

**Correct Option: (d)** 

# Pair I: Majorca

Majorca is an island province and autonomous community in **Spain**, part of the **Balearic Islands** in the western Mediterranean Sea.

• So if the pair mismatches Majorca with any other country or region, it is incorrect.

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#### **Pair II: Normandy**

- Normandy is a region in **northern France**, bordering the English Channel.
- The 80th anniversary of the D-Day landings in 2024 was commemorated there, marking a significant World War II event.
- If Normandy is matched with any other country or event that does not relate to it, the pair is incorrect.



#### Pair III: Sardinia

- Sardinia is an island and autonomous region of **Italy**, second largest in the western Mediterranean after Sicily.
- It lies west of the Italian mainland, south of Corsica (French island), and north of Africa.
- If Sardinia is matched incorrectly (e.g., with another country or region), the pair is wrong.

So, your conclusion is right: all three pairs are **not correctly matched** if they do not align with the facts above.

