



Answer Keys & Explanations of UPSC CSE Prelims 2025

GS-I

Q1. Consider the following types of vehicles:

- I. Full battery electric vehicles
- II. Hydrogen fuel cell vehicles
- III. 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

1. Answer: C

Explanation:

Alternative powertrains—These are powertrains that are not based exclusively on the internal combustion engine. The main options include hybrids and plug-in hybrids, full battery electrics, and hydrogen fuel cell vehicles.

Statement 1 is correct. BEVs run solely on electricity stored in batteries and use electric motors for propulsion. They produce zero tailpipe emissions and are a major category under alternative powertrains.

Statement 2 is correct. FCEVs use a hydrogen fuel cell to generate electricity, which powers an electric motor. These vehicles are powered by hydrogen, not fossil fuels, and are also classified as alternative powertrain vehicles due to their zero-emission profile.

Statement 3 is correct. These are hybrid vehicles that combine a hydrogen fuel cell with an auxiliary power source like a battery or internal combustion engine. Since they use hydrogen-based propulsion as a primary source, they are also considered alternative powertrain vehicles.

All 3 types (statements 1, 2, and 3) are correct. Hence, the number of alternative powertrain vehicles is 3.

https://dieselnet.com/tech/energy_powertrains.php

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

- I. All types of UAVs can do vertical landing.
- II. All types of UAVs can do automated hovering.
- III. All types of UAVs can use battery only as a source of power supply.

How many of the statements given above are correct?

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

2. Answer: D

Explanation:

Statement 1: All types of UAVs can do vertical landing is incorrect

Only VTOL (Vertical Take-Off and Landing) UAVs — like multirotors and some hybrid fixed-wing drones — can perform vertical landings.

Fixed-wing UAVs typically require a runway or catapult-based landing, and cannot perform vertical landings.

Example of UAVs that can do vertical landing:

- **DJI Phantom 4 (Quadcopter)** – Multirotor drone with VTOL capability.
- **WingtraOne (Hybrid VTOL)** – Fixed-wing drone with vertical landing ability.

Example of UAVs that cannot do vertical landing:

- **RQ-4 Global Hawk (Fixed-wing)** – Requires runway for take-off and landing.
- **Delair UX11 (Fixed-wing)** – Needs a hand launch or catapult; lands by gliding.

Statement 2: All types of UAVs do automated hovering is incorrect

UAVs that *can* hover:

- **DJI Mavic Air (Quadcopter)** – Hovers using onboard GPS and sensors.
- **AeryonSkyRanger (Rotorcraft)** – Used for surveillance; can hover stably.

UAVs that *cannot* hover:

- **Bayraktar TB2 (Fixed-wing)** – Needs forward movement; cannot stay stationary.
- **Predator MQ-1 (Fixed-wing)** – Designed for long-endurance flights, no hovering.

Statement 3: All types of UAVs can use battery only as a source of power is incorrect

Battery-powered UAVs:

- **DJI Mini 3 Pro** – Lightweight drone with lithium-polymer battery.
- **Parrot Anafi** – Uses a rechargeable battery for power.

Non-battery-powered UAVs:

- **MQ-9 Reaper (Jet-fuel engine)** – Runs on kerosene-based aviation fuel.
- **AeroVironment Global Observer** – Uses liquid hydrogen fuel cell.

https://www.designation-systems.net/dusrm/app2/q-4.html?utm_source=chatgpt.com

https://en.wikipedia.org/wiki/General_Atomics_MQ-9_Reaper?utm_source=chatgpt.com

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

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

How many of the above usually make up battery cathodes?

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

3. Answer: C

Explanation:

In electric vehicle batteries, three out of the four elements listed (cobalt, graphite, lithium, nickel) make up the cathode material: lithium, cobalt, and nickel. Lithium-nickel-manganese-cobalt oxide (NMC) batteries are common, using nickel, manganese, and cobalt in the cathode. Graphite is typically used in the anode.

Lithium, cobalt, and nickel: are key components of the cathode material, which is the positive electrode in a lithium-ion battery.

Graphite: is primarily used in the anode, which is the negative electrode.

NMC (lithium-nickel-manganese-cobalt oxide) batteries: are a common type of EV battery, using a combination of nickel, manganese, and cobalt in their cathode.

The cathode material: determines the overall energy density and performance of the battery.

[https://www.aquametals.com/recyclopedia/lithium-ion-anode-and-cathode-](https://www.aquametals.com/recyclopedia/lithium-ion-anode-and-cathode-materials/#:~:text=Cathode%20active%20materials%20(CAM)%20are,oxide%20(LiNiMnCoO2%20or%20NMC).)

[materials/#:~:text=Cathode%20active%20materials%20\(CAM\)%20are,oxide%20\(LiNiMnCoO2%20or%20NMC\).](https://www.aquametals.com/recyclopedia/lithium-ion-anode-and-cathode-materials/#:~:text=Cathode%20active%20materials%20(CAM)%20are,oxide%20(LiNiMnCoO2%20or%20NMC).)

Q4. Consider the following:

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

How many of them contain plastic?

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

4. Answer: C

Explanation:

Cigarette Butts Contain Plastic

The **filter** of most cigarette butts is made of **cellulose acetate**, a type of plastic. It does **not biodegrade quickly** and contributes significantly to plastic pollution.

Reference: https://www.oceancare.org/en/stories_and_news/cigarette-butts-pollution/

Eyeglass Lenses Contain Plastic (commonly)

Most modern lenses are made from **polycarbonate**, **CR-39 plastic**, or **Trivex** – all of which are **plastics**. Glass lenses are rare today due to their weight and shatter risk.

Reference: <https://www.optometrists.org/general-practice-optometry/optical/guide-to-optical-lenses/guide-to-high-index-lenses/glass-or-plastic-which-type-of-lens-should-you-choose/>

Car Tyres Contain Plastic

Tyres are a **composite** of natural rubber, **synthetic rubber (a plastic polymer)**, and other materials like carbon black.

Styrene-butadiene rubber (SBR) is a commonly used synthetic plastic in tyres.

Reference: <https://theconversation.com/car-tyres-shed-a-quarter-of-all-microplastics-in-the-environment-urgent-action-is-needed-244132>

Q5. Consider the following substances:

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

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

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

5. Answer: B

Explanation:

Coal gasification is a process that converts coal into **syngas** (a mixture of CO, H₂, and CO₂). This syngas can then be used as a **feedstock** to produce various chemicals and fuels.

1. Ethanol – Yes

Ethanol can be synthesized **indirectly** from syngas via **fermentation or catalytic conversion**, particularly using processes like the **thermochemical route** or **Fischer-Tropsch synthesis**. Hence, **coal gasification can contribute to ethanol production**.

2. Urea – Yes

Urea is produced from **ammonia and CO₂**. **Ammonia** is synthesized using hydrogen (from syngas) and nitrogen (from air), and **syngas from coal gasification** is a major hydrogen source in this process. Therefore, **coal gasification can be a starting point for urea production**.

3. Nitroglycerine – No

Nitroglycerine is made by **nitrating glycerol** (a byproduct of biodiesel or soap production). Its production is **not related to coal gasification or syngas pathways**.

<https://www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/coal-gasification#:~:text=Synthesis%20gas%20can%20be%20used,an%20associated%20steam%20turbine%20unit.>

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

6. Answer: B

Explanation:

CL-20, HMX, and LLM-105 are all explosive compounds, with CL-20 and HMX being high-energy explosives and LLM-105 being an insensitive explosive. CL-20 is known for its high energy density and is used in propellants and explosives. HMX, also known as octogen, is another powerful explosive used in various applications. LLM-105, or 2,6-diamino-3,5-dinitropyrazine-1-oxide, is used in co-particle formulations to enhance safety and improve energy performance.

https://www.researchgate.net/figure/Supercell-models-of-CL-20-and-LLM-105_fig3_359803686

Q7. Consider the following statements:

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

Which of the statements given above are correct?

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

7. Answer: C

Explanation:

Statement 1 is correct: Microsoft introduced Majorana 1, the world's first quantum chip powered by a new Topological Core architecture that it expects will realize quantum computers capable of solving meaningful, industrial-scale problems in years, not decades.

Statement 2 is incorrect: Microsoft launched it.

Statement 3 is correct: Deep learning is a subset of machine learning (a subset of artificial intelligence). Unlike ML, deep learning uses neural networks for self-training.

<https://cloud.google.com/discover/deep-learning-vs-machine-learning>

<https://news.microsoft.com/source/features/innovation/microsofts-majorana-1-chip-carves-new-path-for-quantum-computing/>

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

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

Which of the statements given above are correct?

- (a) I and II only

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

8. Answer: D

Explanation:

Statement 1 is correct: Monoclonal antibodies are **lab-engineered proteins** designed to bind specifically to a particular **antigen**. They are produced by cloning a unique white blood cell and are identical copies of a single antibody.

Statement 2 is correct: mAbs **target specific antigens** on pathogens or abnormal cells (like cancer). Their binding can **neutralize pathogens**, mark cells for destruction by other immune cells, or block disease pathways. This **activates or modulates the immune response**.

Statement 3 is correct: Experimental monoclonal antibodies have been developed to treat **Nipah virus infections**. Example: **m102.4**, a monoclonal antibody targeting the Nipah virus glycoprotein, has shown promise in preclinical studies and was used on a compassionate basis in past outbreaks.

<https://www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy/monoclonal-antibodies.html#:~:text=NOTE:%20Some%20monoclonal%20antibodies%20used%20to%20treat,they%20help%20the%20immune%20system%20find%20and>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4467163/#:~:text=Currently%2C%20the%20most%20promising%20post,the%20utility%20of%20using%20m102.>

<https://www.sciencedirect.com/topics/medicine-and-dentistry/monoclonal-antibody#:~:text=Hal%20Scofield%20MD-.Monoclonal%20antibodies,cell%20to%20enhance%20immune%20recognition.>

Q9. Consider the following statements:

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

How many of the statements given above are correct?

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

9. Answer: D

Explanation:

Statement 1 is incorrect: Viruses not only survive but thrive in ocean water. Marine environments contain **vast numbers of viruses**, especially **bacteriophages** (viruses that infect bacteria). It's estimated that **millions of viruses exist per milliliter of seawater**.

<https://microbiologysociety.org/publication/past-issues/oceans/article/viruses-the-invisible-majority-of-the-oceans.html>

Statement 2 is incorrect: Bacteriophages are viruses that **specifically infect bacteria**. They are widely studied in genetics and biotechnology and play a key role in microbial ecology.

<https://www.ncbi.nlm.nih.gov/books/NBK493185/>

Statement 3 is incorrect: Viruses often **hijack and alter the host cell's transcription machinery** to replicate themselves. Some viruses **shut down host gene expression**, while others **upregulate specific genes** to favor their own replication.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC8534161/>

Q10. Consider the following statements:

Statement I:

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

Statement II:

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

Statement III:

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

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

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

10. Answer: A

Explanation:

Statement 1 is correct: To remove inorganic and organic pollutants, and colors from effluent streams, activated carbon is used to remediate contaminants from various industries, including fertilizer plants, vehicles, petroleum, pharmaceuticals, cosmetics, and textiles.

Statement 2 is correct: Activated carbon is a promising materials which has been extensively studied by several researchers. Activated carbon is a low-cost material with distinguishable properties like high specific surface area, high porosity, and desired surface functionalization. Because of that, activated carbon is diversely used for effective applications in adsorption, removal of pollutants, water treatment, and energy, etc

Statement 3 is correct: Activated carbon is produced from environmental wastes with high carbon content. Lignocellulosic and coal materials have been used as raw materials planned for manufacturing of activated carbons.

Statement 2 explains why activated carbon is effective (surface area and adsorption capacity). Statement 3 explains how it can be produced, reinforcing its attractiveness as a tool.

Both statements 2 and 3 are correct and explain the statement 1.

<https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/activated-carbon>

Q11. Consider the following statements:

Statement I:

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

Statement II:

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

Statement III:

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

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

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

11. Answer: B

Explanation:

Statement I is correct

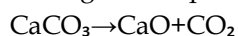
The cement industry is a **major source of CO₂ emissions**, contributing to more than 5% of global carbon dioxide emissions. These emissions come both from **energy use** (fossil fuel combustion) and from **chemical decomposition** of limestone (CaCO₃).

Statement II is correct but does not explain I

In cement production, **silica-bearing clay** is mixed with **limestone** to form the raw mix. However, this mixing process itself does **not release CO₂**, so it **does not explain** the emissions mentioned in Statement I. This combination forms the raw mix for cement production. Limestone provides the calcium carbonate, while clay adds silica, alumina, and iron oxide. This blend is then finely ground and proportioned to create the raw mix for cement production.

Statement III is correct and explains I

During clinker production, **limestone (CaCO₃)** is heated and decomposes into **lime (CaO)** and **CO₂**.



This **calcination process** is the **primary cause of carbon emissions** in cement manufacturing, thus directly explaining Statement I.

Science direct assets

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 COP 28 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 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 the them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

12. Answer: C

Explanation:

Statement 1 is correct: India refrained from signing the COP28 Declaration on Climate and Health, with sources pointing out that curbing greenhouse gas use for cooling in the health sector, which is one of the points in the document, may not be practical or achievable within the country's healthcare infrastructure in the short term.

Statement 2 is incorrect: The COP28 Declaration on Climate and Health is a non-binding, non-negotiated call to action and collective commitment that reflects the concerns and common position of countries on the importance of health within climate discourse and in the COP process. It begins to articulate how climate-health is defined and how parties come together to address the urgent need for integrating climate and health.

The declaration is intended to serve as a call to action and joint vision from countries to convene and collaborate around, and can be taken forward to at the upcoming World Health Assembly and at future COPs. Endorsement of the declaration will be significant and symbolic in showing country consensus around the importance of integrating climate and health and the impact of climate change on human health.

Statement 3 is correct: It's not practical for India to curb greenhouse gases for cooling in the health sector because vaccines, drugs etc require cold storage rooms. "We need cold storages for storing vaccines and medicines and these are linked to making our healthcare systems resilient," Secretary, Ministry of Environment and Forests remarked, "However, suggestions that using these are contributing to climate emissions and that we must choose some fuels over the other are not acceptable."

<https://economictimes.indiatimes.com/news/india/india-refrains-from-signing-cop28-health-climate-declaration/articleshow/105708466.cms?from=mdr>

<https://www.preventionweb.net/publication/cop28-declaration-climate-and-health>

<https://www.healthcareexecutive.in/blog/decarbonizing#:~:text=Towards%20Sustainable%20Healthcare%20Delivery,healthcare%20systems%20for%20its%20population.>

<https://www.thenewsminute.com/news/why-india-opted-not-to-sign-india-declaration-on-climate-and-health>

Q13. Consider the following statements:

Statement I:

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

Statement II:

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

Statement III:

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

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

- (a) Both Statements II and 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 Statement II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

13. Answer: B

Explanation:

Statement 1 is correct: Days on Earth are growing slightly longer, and that change is accelerating. The reason is connected to the same mechanisms that also have caused the planet's axis to meander by about 30 feet (10 meters) in the past 120 years. The findings come from two recent NASA-funded studies focused on how the climate-related redistribution of ice and water has affected Earth's rotation.

<https://www.jpl.nasa.gov/news/nasa-funded-studies-explain-how-climate-is-changing-earths-rotation/>

Statement 2 is correct: Although solar flares, and associated coronal mass ejections, can bombard Earth's outermost atmosphere with tremendous amounts of energy, most of that energy is reflected back into space by the Earth's magnetic field. Because the energy does not reach our planet's surface, it has no measurable influence on surface temperature.

Solar flares and coronal mass ejections do bombard the outer atmosphere, affecting communication, satellites, and sometimes auroras, but they do not cause Earth's axial shift.

<https://www.climate.gov/news-features/climate-qa/do-solar-storms-cause-heat-waves-earth>

Statement 3 is correct: This movement of water redistributes the Earth's mass, increasing the moment of inertia and slowing the planet's rotation, leading to slightly longer days. Scientists at ETH Zurich and other research groups have confirmed this effect.

This redistribution of mass towards the equator affects Earth's moment of inertia and hence contributes to the shift in Earth's axis of rotation. This directly supports Statement I.

<https://www.indiatoday.in/science/story/climate-change-is-altering-earths-rotation-as-polar-ice-melts-2567942-2024-07-17#:~:text=In%20Short,we%20realize%2C%22%20Soja%20notes.>

Q14. Consider the following statements:

Statement I:

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

Statement II:

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

Statement III:

Article 6 of the Paris Agreement on climate change intends to promote inter-country nonmarket strategies to reach their climate targets.

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

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

14. Answer: A

Explanation:

Statement 1 is correct:

Article 6 of the Paris Agreement enables international cooperation to tackle climate change and to unlock financial support for developing countries.

There are three components to Article 6:

Article 6.2: Provides accounting and reporting guidance for Parties to use internationally transferred mitigation outcomes towards their nationally determined contributions (NDCs).

Article 6.4: Establishes a new UNFCCC mechanism which can be used to trade high-quality carbon credits.

Article 6.8: Provides opportunities for non-market-based cooperation for enhancing climate action.

Article 6 deals with cooperative approaches, carbon markets, and non-market mechanisms—a complex and widely debated issue in climate negotiations, particularly at COPs. Hence, it is frequently discussed in global forums.

Statement 2 is correct: Article 6.2 and 6.4 specifically outline how international carbon markets can be used to meet Nationally Determined Contributions (NDCs). These allow for Internationally Transferred Mitigation Outcomes (ITMOs) and a Sustainable Development Mechanism.

Statement 3 is correct: Article 6.8 recognizes non-market approaches that support climate targets through capacity-building, finance, and technology transfer. These are intended to complement market mechanisms.

Statement I is explained by both II and III because: Article 6's relevance (carbon markets and non-market strategies) is precisely why it's frequently discussed in global climate forums.

<https://earth.org/explainer-what-is-article-6-of-the-paris-agreement-and-why-is-it-a-key-topic-cop28/>

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)

15. Answer: A

Explanation:

Building on ADB's key initiatives as Climate Bank for Asia and the Pacific, ADB launched the Nature Solutions Finance Hub, or NSFH, for the entire Asia and the Pacific. The NSFH is a platform combining an integrated set of activities—with innovative finance approaches—to scale up NBS projects and finance flows for a measurable impact in conserving biodiversity and ensuring climate resiliency.

<https://www.adb.org/sites/default/files/publication/952636/nature-solutions-finance-hub-flyer.pdf>

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

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

Select the correct answer using the code given below.

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

16. Answer: C

Explanation:

Statement 1 is correct: DAC is a method that captures CO₂ directly from the atmosphere and either stores it underground (sequestration) or uses it industrially.

Statement 2 is correct: Captured CO₂ can be used as a feedstock for making chemicals, fuels, and even plastics. In food processing, CO₂ is used for carbonation and preservation.

Statement 3 is correct: Captured CO₂ can be reacted with green hydrogen to produce synthetic fuels (e-fuels), especially important for aviation decarbonization.

https://en.wikipedia.org/wiki/Direct_air_capture#Applications

<https://www.wri.org/insights/direct-air-capture-resource-considerations-and-costs-carbon-removal>

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 areas.
- III. In its natural habitat, it is an arboreal species.

Which of the statements given above is/are correct?

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

17. Answer: D

Explanation:

Statement 1 is incorrect: The Peacock tarantula is a spider, an arachnid, not a crustacean. It is carnivorous, feeding on insects.

Statement 2 is correct: It is critically endangered and endemic to a small forest patch in Andhra Pradesh.

Statement 3 is correct: It lives on trees (arboreal), constructing silken retreats in tree holes.

https://en.wikipedia.org/wiki/Poecilotheria_metallica

Q18. Consider the following statements:

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

Which of the statements given above is/are correct?

- (a) I and III only

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

18. Answer: C

Explanation:

Statement 1 is incorrect: As per recent data (Global Carbon Atlas), India's per capita CO₂ emissions are around 2 t CO₂, not less than 0.5.

Statement 2 is correct: India ranks second after China in the Asia-Pacific in CO₂ emissions from fuel combustion (IEA, 2023).

Statement 3 is correct: Major CO₂ emissions come from coal-based power plants and industrial heat processes.

<https://www.iea.org/countries/india/emissions>

Q19. Consider the following pairs:

Plant Description

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

How many of the above pairs are correctly matched?

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

19. Answer: B

Explanation:

Pair 1 is correct: Cassava is a perennial woody shrub, specifically belonging to the spurge family (Euphorbiaceae). It is native to South America and now cultivated globally in tropical and subtropical regions. Cassava is mainly known for its edible root, a starchy tuberous root that is a significant source of carbohydrates.

<https://www.sciencedirect.com/topics/food-science/cassava>

Pair 2 is correct:

Ginger is a herbaceous perennial plant with a unique structure featuring a pseudostem. Its leaves and stems are actually formed by overlapping leaf sheaths, creating a false stem that appears above ground. The true stem, a rhizome, is an underground horizontal stem that stores nutrients. This rhizome is what is commonly known as ginger root.

<https://en.wikipedia.org/wiki/Ginger>

Pair 3 is correct:

Malabar spinach (Basella alba) is a herbaceous, climbing plant. It is a perennial, meaning it can live for multiple years, and is often grown as an annual in colder climates. It's known for its fast growth and ability to climb, requiring a trellis or other support. Malabar spinach is a popular vegetable, especially in tropical and subtropical regions, and is known for its nutritional value and unique flavor.

<https://hort.extension.wisc.edu/articles/malabar-spinach-basella-alba/>

Pair 4 is incorrect:

Mint is a plant in the Lamiaceae family, and while some species can be annual, it's more common for mint to be a perennial herb. Mints are known for their aromatic leaves, square stems, and ability to spread through

underground or overground runners (stolons). They are often considered invasive due to their prolific growth.

<https://en.wikipedia.org/wiki/Mentha>

Pair 5 is incorrect:

While papaya is often called a tree, it's more accurately described as a short-lived, succulent, herbaceous plant. It has a single, non-woody stem that can grow up to 30 feet tall, and it lacks the true bark of a woody tree. It's also a perennial, meaning it lives for more than two years.

<https://en.wikipedia.org/wiki/Papaya>

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 photo-synthetic 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

20. Answer: B

Explanation:

Statement 1 is incorrect: Scientists estimate that roughly half of the oxygen production on Earth comes from the ocean. The majority of this production is from oceanic plankton – drifting plants, algae, and some bacteria that can photosynthesize. One particular species, *Prochlorococcus*, is the smallest photosynthetic organism on Earth. But this little bacteria produces up to 20% of the oxygen in our entire biosphere. That's a higher percentage than all of the tropical rainforests on land combined.

Statement 2 is correct: Phytoplankton contribute to nearly 50–80% of the global oxygen supply.

Statement 3 is incorrect: Oxygen content in air is much higher (21%) than in water (~0.001–0.008%).

<https://oceanservice.noaa.gov/facts/ocean-oxygen.html>

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

21. Answer: C

Explanation:

Statement 1 is correct: Raja Ram Mohan Roy had a deep appreciation for ancient Indian philosophical systems such as the Vedanta and Upanishads. He valued traditional Indian philosophy and promoted its rational aspects.

Statement 2 is correct: He championed rationalism, scientific temper and social equality, especially gender equality.

Additional Information

Raja Ram Mohan Roy (1772–1833), often hailed as the “**Father of Modern India**,” was a pioneering social and religious reformer of the Bengal Renaissance. Born in Radhanagar in Bengal, he was deeply influenced by **Persian, Arabic, Sanskrit** and later **Western philosophy**, which shaped his rational and progressive outlook. He vehemently opposed **regressive social practices** like **Sati, child marriage** and **purdah** and played a pivotal role in the **abolition of Sati** through sustained advocacy that influenced Lord William Bentinck’s 1829 regulation. Roy founded the **Brahmo Samaj** in 1828, promoting **monotheism, social equality** and **rejection of idol worship and caste discrimination**. A strong proponent of **modern education**, he established institutions like the **Anglo-Hindu School** and **Vedanta College**, advocating for science, reason and English education. His efforts also included championing **women’s rights**, especially inheritance rights and education. As a representative of **Mughal Emperor Akbar II**, he travelled to England to uphold reforms, where he died in 1833 in Bristol. Raja Ram Mohan Roy’s legacy as a **visionary reformer** and **bridge between Indian tradition and modernity** remains foundational in India's socio-cultural evolution.

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

- I. Boycott of law-courts and foreign cloth
- II. Observance of strict non-violence
- III. Retention of titles and honours without using them in public
- IV. 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

22. Answer: C

Explanation:

Statement I is correct. Boycott of British law courts and foreign-made cloth was a major part of the Non-Cooperation Movement to weaken British economic and legal control.

Statement II is correct. The movement strongly emphasized strict non-violence, expecting participants to avoid any violent acts.

Statement III is incorrect. Instead of retaining British titles and honours quietly, people were encouraged to **give them up** entirely as a form of protest.

Statement IV is correct. The movement promoted the establishment of Panchayats to settle disputes locally, as an alternative to British institutions.

Q23. The irrigation device called 'Araghata' 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

23. Answer: B

Explanation

Araghatta, also known as the **Persian wheel** or **Rehat**, is a traditional water-lifting device widely used for irrigation in India and other regions. This mechanical system operates by animal power, typically bullocks or buffaloes, which rotate a wheel fitted with buckets or pots to lift water from wells. The name "Araghatta" derives from the Sanskrit words *ara* (spoke) and *ghatta* (pot), describing the wheel’s structure and water containers. Primarily employed to irrigate fields in areas with scarce water or low rainfall, Araghatta has

historical roots dating back to medieval India. It is also an environmentally sustainable irrigation method, as it draws water mainly from the dynamic water table without excessive depletion.

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

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

24. Answer: A

Explanation

Mahendravarman I, who ruled the Pallava kingdom from AD 600 to 630, is remembered as one of its greatest monarchs. He bore the title **Vichitrachitta**, meaning “unique” or “unconventional thoughts,” reflecting his innovative approach to governance and art. Mahendravarman was a pioneer in stone temple architecture, famously stating that temples should never again be built from perishable materials. Besides being a skilled ruler, he was also an accomplished artist, musician and writer. His famous Sanskrit play **Mattavilasa Prahasana** (The Delightful Play of Drunken Sport) showcases his literary talent and sharp wit. His contributions were further continued by his son **Narashimhavarman I**, also known as **Gunabhara**. Mahendravarman’s diverse interests and original ideas set him apart as a visionary leader in South Indian history.

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

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

25. Answer: B

Explanation:

Fa-Hien (Faxian) was a Chinese Buddhist monk and disciple of Kumarajiya who traveled to India around 399 CE to 412 CE during the reign of **Chandragupta II (Vikramaditya)** of the Gupta Empire.

- **Purpose:** To collect authentic Buddhist scriptures, especially related to the *Vinaya Pitaka* (monastic discipline).
- **Travel account:** Documented in *A Record of Buddhist Kingdoms* (Fo-kuo Chi), providing insights into Indian society, administration, Buddhist monasteries and temples.
- **Description of India:** Peaceful, well-administered, with thriving Buddhist centers.

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)

26. Answer: C

Explanation

In 1025 CE, the Chola Emperor **Rajendra I** launched a remarkable naval invasion against **Srivijaya**, a powerful maritime empire in Southeast Asia, leading to the downfall of the **Sailendra Dynasty** that ruled

Srivijaya. This expedition was unprecedented in Indian history, as India traditionally maintained peaceful relations with Southeast Asian states.

Rajendra I's campaign targeted several locations across present-day **Indonesia** and the **Malay Peninsula**, significantly expanding Chola influence beyond the Indian subcontinent. This military success also facilitated the growth of Tamil merchant guilds such as the **Manigramam**, **Ayyavole** and **Ainnurruvar**, strengthening commercial ties and Tamil presence in Southeast Asia.

Interestingly, this period coincided with the return journey of the Bengali Buddhist scholar **Atiśa** (c. 982–1054) from Sumatra to India and Tibet in 1025, reflecting the vibrant religious and cultural exchanges occurring across these regions.

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

Territorial Region River flowing in the region

- I. Asmaka : Godavari
- II. Kamboja : Vipasa
- III. Avanti : Mahanadi
- IV. Kosala : Sarayu

How many of the pairs given above are correctly matched?

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

27. Answer: B

Explanation:

Pair I is correct.

Asmaka was located along the Godavari river.

Pair II is incorrect.

Kamboja was situated in the northwest region, far from the Vipasa (Beas) river. The main river near Kamboja was not Vipasa.

Pair III is incorrect.

Avanti was in the Malwa region, near rivers like Chambal and Narmada, not the Mahanadi.

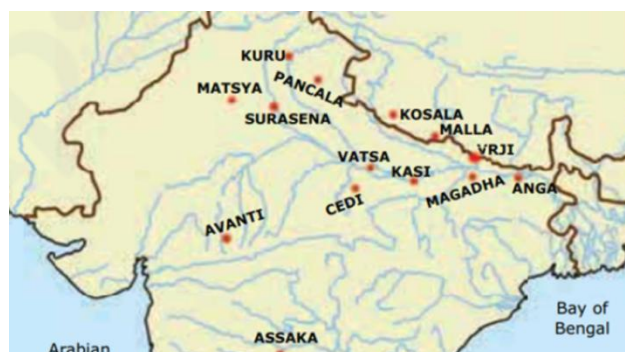
Pair IV is correct.

Kosala was located along the Sarayu river.

Therefore, only two pairs are correctly matched.

Additional Information

Mahajanapada	Capital	Present Location
Kasi	Varanasi	Varanasi
Kosala	Sravasti	Uttar Pradesh East
Anga	Champa	Bhagalpur and Munger
Magadha	Rajagriha	Gaya and Patna
Vajji	Vaishali	Bihar
Malla	Kusinara	Deoria and Uttar Pradesh
Chedi	Sothivati	Bundelkhand, MP
Vatsa	Kusambi	Prayagraj
Kuru	Indraprastha	Meerut and Haryana
Panchala	Kampliya	Uttar Pradesh West
Matsya	Viratnagar	Jaipur
Surasena	Mathura	Uttar Pradesh West
Assaka	Paithan	Bank of Godavari
Avanti	Ujjaini	Madhya Pradesh/Malwa
Gandhara	Taxila	Rawalpindi
Kamboja	Pooncha	Kashmir and Hindukush



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

28. Answer: D

Explanation:

Pandit Vishnu Digambar Paluskar (18 August 1872 – 21 August 1931) was a renowned Hindustani classical musician known for singing the original version of the bhajan *Raghupati Raghava Raja Ram* and for arranging India's national song *Vande Mātaram* as it is heard today.

On **5 May 1901**, Paluskar founded **Gandharva Mahavidyalaya** in Lahore – one of the first Indian classical music schools run on **public support and donations**, not royal patronage. The school was open to all and it challenged the traditional guru-shishya system where students lived with their teachers. Many early students went on to become prominent musicians and teachers, enhancing respect for musicians in society.

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

29. Answer: B

Explanation:

Ashokan inscriptions highlight the importance of three key district-level officers in the Mauryan administration:

- **Pradeshika:** The official responsible for overall administration of the district (Pradesha).
- **Rajuka:** A rural officer tasked specifically with land measurement and assessment.
- **Yukta:** Subordinate officers who assisted in managing the king's revenues at the local level.

These officials were crucial for the effective governance of the Mauryan Empire, ensuring smooth administration and revenue collection at the grassroots level, as confirmed by Ashoka's edicts.

Edict	Ashokan Inscription Details
Pillar Edict I	Ashoka's principle of protecting his people.
Pillar Edict II	Dhamma (moral law/ethical conduct).
Pillar Edict III	Avoidance of cruelty, sin, harshness, pride and anger among subjects.
Pillar Edict IV	Responsibilities of the Rajukas (rural officials).
Pillar Edict V	Lists of animals and birds that should not be killed on certain days; and those that should never be killed.
Pillar Edict VI	Dhamma policy of the State (state's ethical governance).
Pillar Edict VII	Ashoka's efforts to promote Dhamma and tolerance for all sects.

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

30. Answer: C

Explanation

Statement I is correct: At the Nagpur Session of the Indian National Congress in 1920, the Congress adopted **Swaraj (self-rule)** as its goal to be achieved **by all legitimate and peaceful means**. This became the official objective during the launch of the Non-Cooperation Movement under Gandhi's leadership.

Statement II is correct: The Non-Cooperation Movement was planned to be implemented in **phases**. Gandhi had proposed that **civil disobedience and non-payment of taxes** would be introduced only if **Swaraj was not achieved within a year** and if the government **resorted to repression**.

Q31. With reference to investments, consider the following:

- I. Bonds
- II. Hedge Funds
- III. Stocks
- IV. 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

31. Answer: B

Explanation:

I. Bonds – Not treated as Alternative Investment Funds (AIFs). Bonds are traditional debt instruments, not classified under AIFs. *Hence, point 1 is incorrect.*

II. Hedge Funds – Treated as AIFs. In India, hedge funds come under **Category III AIFs**, which include complex or diverse strategies. *Hence, point 2 is correct.*

III. Stocks – Not AIFs. Stocks are conventional investment instruments traded on public exchanges. *Hence, point 3 is incorrect.*

IV. Venture Capital – Treated as AIFs. Venture capital funds are classified under **Category I AIFs**, which invest in start-ups and early-stage ventures. *Hence, point 4 is correct.*

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

32. Answer: D

Explanation:

- **I is correct.** The RBI earns income through **buying and selling government bonds** under open market operations. This includes interest income and capital gains.
- **II is correct.** The RBI earns from **buying and selling foreign currency** as part of its forex management, which can generate profits depending on exchange rate movements. It earns income through trading foreign currencies and investing the reserves in foreign assets (like U.S. Treasury bonds) which yield interest.
- **III is incorrect.** RBI **does not manage pension funds** for profit. Pension fund management is handled by separate bodies like **PFRDA (Pension Fund Regulatory and Development Authority)** and EPFO. Hence, this is not a source of income for RBI.
- **IV is incorrect.** The RBI **does not lend to private companies directly**. It lends to **commercial banks** and the **government**, typically through repo operations and ways and means advances, not to private firms.
- **V is incorrect.** Though printing notes is an expenditure, the **seigniorage** (difference between the face value of currency and the cost of printing it) is a significant **source of income** for the RBI.

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

Organization Some of its functions It works under

- I. Directorate of
Enforcement
Enforcement of the Fugitive
Economic Offenders Act,
2018
Internal Security Division-I,
Ministry of Home Affairs
- II. Directorate of
Revenue Intelligence
Enforces the provisions of the
Customs Act, 1962
Department of Revenue, Ministry
of Finance
- III. Directorate
General of Systems and Data Management
Carrying out big data
analytics to assist tax officers
for better policy and nabbing
tax evaders
Department of Revenue, Ministry
of Finance

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

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

- (c) All the three
- (d) None

33. Answer: B

Explanation

I. Directorate of Enforcement

- **Function:** Enforcement of the **Fugitive Economic Offenders Act, 2018** – Correct.
- **Works under:** **Incorrect** – It works under the **Department of Revenue, Ministry of Finance**, not the Ministry of Home Affairs.

II. Directorate of Revenue Intelligence

- **Function:** Enforces the provisions of the **Customs Act, 1962** – Correct.
- **Works under:** **Correct** – It functions under the **Department of Revenue, Ministry of Finance**.

III. Directorate General of Systems and Data Management

- **Function:** Big data analytics to assist tax officers – Correct.
- **Works under:** **Correct** – It works under the **Department of Revenue, Ministry of Finance**.

Q34. Consider the following statements:

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

Which of the statements given above is/are correct?

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

34. Answer: B

Explanation:

Statement I is incorrect. The mandate to submit the **Business Responsibility and Sustainability Report (BRSR)** comes from **SEBI (Securities and Exchange Board of India)**, not the **Reserve Bank of India (RBI)**.

Statement II is correct. The **BRSR** primarily requires companies to make **non-financial disclosures**, covering areas like **environmental, social and governance (ESG)** performance, sustainability, stakeholder relationships and responsible business practices.

Q35. Consider the following statements:

Statement I:

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

Statement II:

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

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

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

35. Answer: D**Explanation:**

Statement I is incorrect. Income from allied agricultural activities like **poultry farming and wool rearing** is **not fully exempt** from tax. Such activities are **considered non-agricultural income** and are taxable unless specifically exempted.

Statement II is correct. Under the Income-tax Act, **rural agricultural land** is **not treated as a capital asset**, meaning capital gains tax does not apply on its sale.

Therefore, **Statement II is correct**, but **Statement I is not correct**.

Additional Information

Agricultural income is exempt from tax under the **Income-tax Act, 1961**. It includes income generated from activities carried out on **agricultural land**, such as **rent earned** from agricultural land, income from the production of **agricultural goods** that require processing before sale and income from **growing and selling crops** like tomatoes. However, income from **allied activities** like poultry farming or wool rearing is **not considered agricultural income** and is taxable. Additionally, while agricultural income is exempt from **central income tax**, many **states impose their own agricultural income tax** as per their respective policies. According to **Section 2(1A)** of the Income-tax Act, agricultural income covers **rent from agricultural land**, income from **processed agricultural goods** and revenue from selling **agricultural produce** grown on such land.

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

36. Answer: C**Explanation:**

Statement I is correct. India has joined the **Minerals Security Partnership (MSP)**, an international initiative to secure supply chains of critical minerals. **India has become 14th member of the Mineral Security Partnership (MSP)** in June 2023.

Statement II is incorrect. India **does not have abundant resources for all 30 critical minerals** it has identified; many critical minerals are imported due to scarcity or limited domestic availability.

Statement III is correct. In 2023, Parliament **amended the Mines and Minerals (Development and Regulation) Act, 1957**, giving the Central Government exclusive powers to auction leases for certain critical minerals to boost mining and strategic resource security.

Q37. Consider the following statements:

Statement I:

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

Statement II:

Bondholders are lenders to a company whereas stockholders are its owners.

Statement III:

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

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

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

37. Answer: A

Explanation:

- **Statement I is correct.** Bondholders face lower risk compared to stockholders because bonds typically have fixed returns and priority in repayment.
- **Statement II is correct.** Bondholders lend money to the company (creditors), while stockholders own a part of the company (equity owners).
- **Statement III is correct.** In case of repayment or liquidation, bondholders are paid before stockholders, thus reducing their risk.

Hence, **both Statement II and Statement III are correct and explain why bondholders are at relatively lower risk (Statement I).**

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 given above are correct?

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

38. Answer: A

Explanation:

Statement I is correct. India's **equity options market** has seen explosive growth, with a record **85 billion trades** in 2023, accounting for **84%** of all equity option contracts traded. This rapid expansion is causing concern among **policymakers and regulators** due to the dominance of **risky short-dated contracts** and the fact that **retail investors now make up over 35%** of options trades, despite **9 out of 10 individual traders incurring losses** in the equity futures and options (F&O) segment.

Statement II is correct. India's **stock market** has surpassed **Hong Kong's** for the first time, reaching a combined market capitalization of **\$4.33 trillion** compared to Hong Kong's **\$4.29 trillion**, making India the **fourth-largest equity market globally**. India's market crossed the **\$4 trillion** mark on December 5, with about half of the growth occurring in the last four years.

The surge is driven by a rapidly expanding **retail investor base** and strong **corporate earnings**. India is emerging as an attractive alternative to China, drawing significant **global investment** due to its **stable political environment** and a **consumption-driven, fast-growing economy**.

Statement III is incorrect. Regulatory bodies such as **SEBI (Securities and Exchange Board of India)** actively regulate the securities market, warn investors about risks and take action against unregistered financial advisors.

Therefore, **only Statements I and II are correct.**

Q39. Consider the following statements:

Statement I:

Circular economy reduces the emissions of greenhouse gases.

Statement II:

Circular economy reduces the use of raw materials as inputs.

Statement III:

Circular economy reduces wastage in the production process.

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

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

39. Answer: A

Explanation:

Statement I is correct. Circular economy helps reduce greenhouse gas emissions by optimizing resource use and minimizing waste.

Statement II is correct. By recycling and reusing materials, circular economy reduces the need for raw material extraction.

Statement III is correct. Circular economy focuses on reducing waste during production through efficient resource management.

Both reduced raw materials use and minimized wastage lead to lower energy consumption and emissions, thereby explaining Statement I.

Additional Information

The **circular economy** is a system where **materials never become waste** and **nature is regenerated**. It keeps **products and materials in circulation** through processes such as **maintenance, reuse, refurbishment, remanufacture, recycling and composting**. This approach addresses **climate change** and other global challenges like **biodiversity loss, waste and pollution** by **decoupling economic activity from the consumption of finite resources**.

Q40. Consider the following statements:

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

II. Borrowings and disinvestment are capital receipts.

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

Which of the statements given above are correct?

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

40. Answer: A

Explanation:

Statement I is correct. Capital receipts either create a liability (like borrowings) or reduce assets (like disinvestment).

Statement II is correct. Both borrowings and disinvestment are classified as capital receipts.

Statement III is incorrect. Interest received on loans is a revenue receipt. It neither create a liability nor reduces the assets.

Hence, only Statements I and II are correct.

Q41. Consider the following countries:

- I. Austria
- II. Bulgaria
- III. Croatia
- IV. Serbia
- V. Sweden
- VI. North Macedonia

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

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

41. Answer: B

Explanation:

The North Atlantic Treaty Organization (NATO) is a military alliance of 32 countries from Europe and North America, established in 1949 to provide collective security against potential threats. It's a political and military alliance with the core principle that an attack on one member is considered an attack on all, triggering collective defence.

- 1. Austria – Not a NATO member (Austria is neutral).
- 2. Bulgaria – NATO member since 2004.
- 3. Croatia – NATO member since 2009.
- 4. Serbia – Not a NATO member (maintains military neutrality).
- 5. Sweden – Joined NATO recently in 2024.
- 6. North Macedonia – NATO member since 2020.

Links:

https://www.nato.int/cps/en/natohq/nato_countries.htm

Q42. Consider the following countries:

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

Andes mountains pass through how many of the above countries?

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

42. Answer: C

Explanation:

The Andes Mountains pass through the following seven South American countries:

- Argentina
- Chile
- Bolivia

- Peru
- Ecuador
- Colombia
- Venezuela

Links:

<https://en.wikipedia.org/wiki/Andes>

<https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1566242>

Q43. Consider the following water bodies:

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

Through how many of them does the equator pass?

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

43. Answer: D

Explanation:

Lake	Location	Position Relative to Equator	Does the Equator Pass Through?
Lake Tanganyika	Central Africa (Tanzania, DRC, Burundi, Zambia)	Mostly south of the Equator	No
Lake Tonlé Sap	Cambodia, Southeast Asia	Well north of the Equator	No
Patos Lagoon	Southern Brazil	Well south of the Equator	No

Links:

<https://en.wikipedia.org/wiki/Equator>

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

44. Answer: D

Explanation:

Statement 1 is correct: India contributes about 80% of the global turmeric production and leads in exports.

Statement 2 is correct: India cultivates over 30 varieties across more than 20 states.

Statement 3 is correct: Maharashtra tops in production, followed by Karnataka, Tamil Nadu, and Telangana (which has high productivity).

Links:

<https://www.ibef.org/news/looking-to-double-turmeric-production-to-two-million-in-five-years-union-minister-of-commerce-and-industry-mr-piyush-goyal#:~:text=In%20the%202022%2D23%20period,its%20headquarters%20in%20Nizamabad%2C%20Telangana.>

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

45. Answer: C**Explanation:**

Statement 1 is correct: Geological studies show that ancient rock formations along the eastern coast of South America (Brazil) closely correspond in type, age, and structure with those along the western coast of Africa. This matching of rock belts suggests these continents were once joined before drifting apart.

Statement 2 is correct: Rich placer gold deposits found in Ghana are believed to have originated from the Brazil plateau, indicating that these regions were once contiguous. The absence of local source rocks in Ghana and the similarity of gold-bearing veins in Brazil support this idea.

Statement 3 is correct: The distinctive Gondwana sedimentary deposits found in India have matching counterparts in Africa, Antarctica, Australia, South America, and Madagascar, indicating these landmasses were once part of the supercontinent Gondwana.

Links:

<https://www.britannica.com/science/continental-drift-geology>
GEOGRAPHY NCERT 11TH CLASS

Q46. Consider the following statements:

Statement I:

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

Statement II:

Subtropical and temperate areas have less dry winds.

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

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

(d) Statement I is not correct but Statement II is correct

46. Answer: C

Explanation:

Statement 1 is correct: Subtropical and temperate regions, especially those near deserts and arid zones such as the Sahara, Arabian Peninsula, Central Asia, and parts of the Middle East, have higher dust emissions due to dry soils and strong winds that lift dust into the atmosphere. In contrast, equatorial regions have dense vegetation and higher rainfall, which reduce dust emissions, and polar regions have ice and snow cover, limiting dust sources.

Statement 2 is incorrect: In fact, subtropical and temperate regions often experience strong dry winds, especially in desert and semi-arid zones, which are responsible for lifting and transporting dust particles. The presence of dry winds is a key factor contributing to the high dust content in these regions. Therefore, the claim that these areas have "less dry winds" is false.

Links:

<https://ncert.nic.in/textbook/pdf/kegy207.pdf>

Q47. Consider the following statements:

Statement I:

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

Statement II:

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

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

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

47. Answer: A

Explanation:

Statement 1 is correct: The temperature over land is generally lower than over the oceans during winter in the Northern Hemisphere. The colder land causes the isotherms to bend towards the equator, while warmer oceans cause the isotherms to bend towards the poles.

Statement 2 is correct: Oceans have a higher heat capacity and cool down more slowly than land, so during the Northern Hemisphere winter, oceans remain relatively warmer compared to the land, which cools rapidly.

Because the air over the oceans is warmer, the isotherms bend poleward over the oceans to reflect the higher temperatures. Conversely, over the colder landmasses, isotherms bend equatorward, indicating lower temperatures. Thus, the difference in temperature between land and ocean in January causes the characteristic bending of isotherms described in Statement I.

Links:

[https://geo.libretexts.org/Bookshelves/Geography_\(Physical\)/The_Physical_Environment_\(Ritter\)/05%3A_Air_Temperature/5.03%3A_Explaining_Patterns_of_Air_Temperature](https://geo.libretexts.org/Bookshelves/Geography_(Physical)/The_Physical_Environment_(Ritter)/05%3A_Air_Temperature/5.03%3A_Explaining_Patterns_of_Air_Temperature)

Q48. Consider the following statements:

Statement I:

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

Statement II:

Chalk is porous and hence can absorb water.

Statement III:

Clay is not at all porous.

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

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

48. Answer: C

Explanation:

Statement 1 is correct: Chalk typically has high permeability due to its porous structure, allowing water to pass through easily. Clay, on the other hand, has very low permeability because its particles are tightly packed, restricting water flow.

Statement 2 is correct: Chalk is a porous sedimentary rock with interconnected pore spaces that can absorb and transmit water. Porosity in chalk can be quite high, often ranging from about 25% to 40%, and its pore structure allows water to flow through it.

Statement 3 is incorrect: Clay does have porosity, but its pores are extremely small and poorly connected, which makes it impermeable or very low in permeability. Saying clay is "not at all porous" is inaccurate; it is porous but effectively impermeable due to pore size and connectivity.

Links:

<https://www.sciencedirect.com/topics/engineering/porous-rock>

<https://en.wikipedia.org/wiki/Chalk>

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

49. Answer: C

Explanation:

Statement 1 is correct: The Earth's atmosphere acts like a blanket, trapping heat through the natural greenhouse effect. Without this atmospheric layer, the Earth's surface would lose heat rapidly to space, causing average temperatures to plummet well below the freezing point of water. Estimates indicate the average surface temperature would be near -18°C (0°F) instead of the current average of about 15°C (59°F).

Statement 2 is correct: The atmosphere absorbs solar radiation and traps outgoing infrared radiation emitted by the Earth's surface, maintaining a stable average temperature suitable for life. This process is the greenhouse effect, primarily driven by greenhouse gases in the atmosphere. The balance between incoming solar energy and outgoing heat radiation determines Earth's energy budget and climate stability.

Statement 3 is correct: Carbon dioxide (CO₂), along with water vapor and other greenhouse gases, absorbs infrared radiation emitted by the Earth and re-radiates some of it back to the surface, effectively trapping

heat. Although CO₂ makes up a small fraction of the atmosphere, its molecular structure allows it to absorb heat efficiently, contributing significantly to the greenhouse effect.

Links:

<https://scied.ucar.edu/learning-zone/atmosphere/what-is-atmosphere>

<https://climate.mit.edu/ask-mit/how-do-greenhouse-gases-trap-heat-atmosphere>

<https://scied.ucar.edu/learning-zone/atmosphere/what-is-atmosphere>

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

50. Answer: C

Explanation:

About Rashtriya Gokul Mission (RGM):

- Launched in 2014 under the National Programme for Bovine Breeding and Dairy Development (NPBBDD).
- Implemented by the Department of Animal Husbandry & Dairying, Ministry of Fisheries, Animal Husbandry & Dairying.
- Focuses on the development and conservation of indigenous bovine breeds (both cattle and buffalo).

Statement 1 is correct: The majority of indigenous cattle (which are low-yielding but well-adapted to Indian conditions) are owned by small and marginal farmers and landless laborers.

The mission helps these groups by:

- Improving productivity of indigenous breeds.
- Providing better animal husbandry practices and genetic improvement.
- Thus, it supports rural livelihood and enhances income generation.

Statement 2 is correct: The core objective of the mission is to:

- Promote scientific breeding.
- Ensure conservation and genetic improvement of indigenous cattle and buffalo breeds.
- Establish Gokul Grams, bull mother farms, and field performance recording for better breeding practices.

The approach is holistic and sustainable, combining animal health, nutrition, and genetics.

Links:

https://dahd.gov.in/schemes/programmes/rashtriya_gokul_mission

Q51. Consider the following statements:

- I. Panchayats at the intermediate level (exist in all States).
- II. To be eligible to be a Member of a Panchayat at the intermediate level, a person should attain the age of thirty years.
- III. The Chief Minister of a State constitutes a commission to review the financial position of Panchayats at the intermediate levels and to make recommendations regarding the distribution of net proceeds of taxes and duties, leviable by the State, between the State and Panchayats at

the intermediate level.

Which of the statements given above are not correct?

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

51. Answer: C

Explanation:

Statement 1 is incorrect: Article 243B(2) exempts States with populations below 20 lakh from mandatorily having intermediate-level Panchayats. States like Goa and Sikkim do not have them.

Statement 2 is correct: Article 243F covers disqualifications, State Panchayat Acts generally prescribe 21 years as the minimum age, aligned with Article 173 and electoral laws. This is widely followed across States.

Statement 3 is incorrect: Article 243I states that the Governor, not the Chief Minister, constitutes the State Finance Commission every five years to review the finances of Panchayats at all levels, not just intermediate.

Links:

<https://bimstec.org/history>

Q52. Consider the following statements in respect of BIMSTEC :

- I. It is a regional organization consisting of seven member States till January 2025.
- II. It came into existence with the signing of the Dhaka Declaration, 1999.
- III. Bangladesh, India, Sri Lanka, 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

52. Answer: D

Explanation:

Statement 1 is correct: BIMSTEC comprises seven member states: Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.

Statement 2 is incorrect: BIMSTEC was established on 6 June 1997 through the Bangkok Declaration, not the Dhaka Declaration of 1999.

Statement 3 is incorrect: The founding members in 1997 were Bangladesh, India, Sri Lanka, and Thailand. Nepal joined later in 2004.

Statement 4 is incorrect: Nepal leads the tourism sector among the various sectors of cooperation in BIMSTEC.

Links:

[https://en.wikipedia.org/wiki/BIMSTEC#:~:text=The%20Bay%20of%20Bengal%20Initiative,US%245.2%20trillion%20\(2023\).](https://en.wikipedia.org/wiki/BIMSTEC#:~:text=The%20Bay%20of%20Bengal%20Initiative,US%245.2%20trillion%20(2023).)

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

53. Answer: C

Explanation:

The Jury for the Gandhi Peace Prize is chaired by the Prime Minister of India and includes:

- The Chief Justice of India
- The Leader of the Opposition in the Lok Sabha
- Two other eminent persons.

The President of India is not a member of this jury.

Links:

<https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1566242>

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

54. Answer: D

Explanation:

Statement 1 is correct: GAGAN is a Satellite-Based Augmentation System (SBAS) developed by ISRO and AAI to augment GPS signals by providing corrections for ionospheric disturbances, satellite orbit errors, and clock inaccuracies. It enhances the accuracy, availability, and integrity of GPS signals, enabling reliable navigation for all phases of flight.

Statement 2 is correct: By improving positional accuracy and integrity, GAGAN facilitates better air traffic management (ATM), enabling more efficient and safer routing, approach, and landing procedures. It supports increased airport accessibility, reduces delays, and optimizes trajectories, thus improving overall ATM quality.

Statement 3 is incorrect: GAGAN benefits extend beyond aviation to other transportation sectors such as maritime navigation, highways, railways, and even forest management and scientific research. It enhances positioning accuracy for multiple applications, not limited to aviation.

Links:

<https://www.ursc.gov.in/navigation/gagan.jsp>

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 AI.

Which of the statements given above is/are correct?

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

55. Answer: A

Explanation:

Statement 1 is correct: The AI Action Summit took place on February 10-11, 2025, at the Grand Palais in Paris, co-chaired by French President Emmanuel Macron and Indian Prime Minister Narendra Modi, as confirmed by multiple sources, including the French Ministry for Europe and Foreign Affairs.

The Bletchley Park Summit (November 2023, UK) was the first global AI Safety Summit, resulting in the Bletchley Declaration, signed by 28 countries, focusing on AI safety and risks.

The Seoul Summit (May 2024, South Korea) built on Bletchley, emphasizing AI safety, innovation, and inclusivity, with the Seoul Declaration signed by 10 countries and the EU.

The Paris Summit aimed to advance prior discussions, focusing on actionable outcomes like sustainable AI and global governance. The French government stated that the event builds on the advances made at Bletchley Park and Seoul, aligning with its goals of establishing scientific foundations and standards for AI.

Statement 2 is incorrect: The Paris AI Action Summit resulted in the "Statement on Inclusive and Sustainable Artificial Intelligence for People and the Planet," signed by 58 countries, including France, China, and India, as noted in various sources like Down to Earth and the Élysée Palace.

However, the US and UK explicitly refused to sign this declaration. The Guardian reported that both nations declined due to concerns over the declaration's lack of clarity on global AI governance and its impact on national security. The UK government stated it did not go far enough in addressing governance and security concerns, while US Vice President JD Vance criticized excessive regulation, reflecting a broader US stance on innovation over restriction.

Links:

<https://www.bbc.com/news/articles/c8edn0n58gwo>

[https://www.mea.gov.in/press-](https://www.mea.gov.in/press-releases.htm?dtl/39023/Prime_Minister_cochairs_AI_Action_Summit_in_Paris_February_11_2025)

[releases.htm?dtl/39023/Prime_Minister_cochairs_AI_Action_Summit_in_Paris_February_11_2025](https://www.mea.gov.in/press-releases.htm?dtl/39023/Prime_Minister_cochairs_AI_Action_Summit_in_Paris_February_11_2025)

Q56. Consider the following pairs :

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

How many of the pairs given above are correctly matched?

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

56. Answer: D

Explanation:

Pair I: International Year of the Woman Farmer – 2026

The United Nations General Assembly has officially declared 2026 as the International Year of the Woman Farmer. This initiative aims to recognise and promote the vital role of women in agriculture and food security worldwide.

Pair II: International Year of Sustainable and Resilient Tourism – 2027

In February 2024, the UN General Assembly adopted a resolution proclaiming 2027 as the International Year of Sustainable and Resilient Tourism. The year is intended to promote sustainable tourism practices that contribute to the achievement of the Sustainable Development Goals (SDGs).

Pair III: International Year of Peace and Trust – 2025

The UN General Assembly declared 2025 as the International Year of Peace and Trust. This designation aims to foster peace and trust among nations and peoples, emphasizing the importance of dialogue and cooperation.

Pair IV: International Year of Asteroid Awareness and Planetary Defence – 2029

In December 2024, the UN General Assembly proclaimed 2029 as the International Year of Asteroid Awareness and Planetary Defence. This observance aims to raise global awareness about the potential hazards of asteroids and the importance of planetary defense measures.

Links:

<https://www.un.org/en/?>

Q57. Consider the following statements with regard to BRICS;

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

Which of the statements given above is/are correct?

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

57. Answer: A

Explanation:

Statement 1 is correct: The 16th BRICS Summit took place in Kazan, Russian Federation, from October 22 to 24, 2024, under Russia's chairmanship. The summit focused on strengthening multilateralism for just global development and security.

Statement 2 is correct: Indonesia officially joined BRICS as a full member in January 2025, becoming the first Southeast Asian nation to do so. This expansion reflects BRICS's growing influence in the Global South.

Statement 3 is incorrect: The actual theme of the 16th BRICS Summit was "Strengthening Multilateralism for Just Global Development and Security." The term "multilateralism" emphasizes collaborative international relations, whereas "multiculturalism" pertains to cultural diversity.

Links:

<https://www.gov.br/planalto/en/latest-news/2025/01/brazil-announces-indonesia-as-full-member-of-brics>

<https://share.google/wMDz0OMvTSPcqU1Pk>

Q58. Consider the following statements about Lokpal :

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

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

Which of the statements given above is/are correct?

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

58. Answer: A

Explanation:

Statement 1 is incorrect: Section 2(1)(o) includes all public servants under government or funded institutions, without geographic limitation. Those posted abroad (e.g., diplomats) are within Lokpal's jurisdiction under Section 14.

Statement 2 is incorrect: Section 3(2)(a) allows the Chairperson to be a current/former CJI, Supreme Court Judge, or an eminent person. MPs/MLAs are barred (Section 4), but the eligibility is broader than just the CJI.

Statement 3 is correct: The applicant nominated must not be less than 45 years of age on the date of assuming office as the chairperson or member of Lokpal.

The chairperson and every member of Lokpal shall hold office for a term of five years from the date on which he or she enters his or her office or until he or she turns 75, whichever is earlier.

Statement 4 is incorrect: Section 14(1)(a) includes the Prime Minister, with restrictions in sensitive areas (e.g., security, foreign affairs), subject to full bench approval. Lokpal can inquire under specified conditions.

Links:

https://www.indiacode.nic.in/handle/123456789/2122?view_type=browse

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

59. Answer: A

Explanation:

Statement 1 is correct: The first-ever Kho Kho World Cup was held from January 13 to 19, 2025, at the Indira Gandhi Indoor Stadium in New Delhi, India.

Statement 2 is incorrect: Indian men beat Nepal with a score of 78-40 in the final to become the World Champion in men category. The Indian men's team secured the championship by defeating Nepal with a score of 54-36 in the final.

Statement 3 is incorrect: Indian women beat Nepal with a score of 54-36 in the final to become the World Champion in women category.

Links:

<https://www.thehindu.com/sport/other-sports/kho-kho-world-cup-after-women-indian-mens-team-also-crowned-champion/article69117372.ece>

Q60. Consider the following statements :

- I. In the finals of the 45th Chess Olympiad held in 2024, Gukesh Dommaraju became the world's youngest winner after defeating the Russian player Jan Nepomniachtchi
- II. Abhimanyu Mishra, an American chess player, holds the record of becoming world's youngest ever Grandmaster.

Which of the statements given above is/are correct?

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

60. Answer: B

Explanation:

Statement 1 is incorrect: Gukesh Dommaraju did not become the world's youngest winner at the 45th Chess Olympiad. While he played a significant role in India's gold medal victory at the Olympiad in Budapest, the event is a team competition, not an individual final. Gukesh became the youngest World Chess Champion by defeating China's Ding Liren in December 2024, not Ian Nepomniachtchi.

Statement 2 is correct: Abhimanyu Mishra, an American chess prodigy, became the youngest Grandmaster in history at the age of 12 years, 4 months, and 25 days in June 2021.

Links:

[https://en.wikipedia.org/wiki/Abhimanyu_Mishra#:~:text=Abhimanyu%20Mishra%20\(born%20February%205,4%20months%2C%20and%2025%20days.](https://en.wikipedia.org/wiki/Abhimanyu_Mishra#:~:text=Abhimanyu%20Mishra%20(born%20February%205,4%20months%2C%20and%2025%20days.)

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 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

61. Answer: A

Explanation:

Statement 1 is correct: Phosphorescent properties of rare earths (like europium, terbium, yttrium) are used in display technology.

These properties enable the use of REEs in screens, explaining their presence in TVs and monitors.

Europium and Yttrium (oxides) produce the red colors in television screens and smart phone screens. Eu, Y, and Tb are used in the manufacturing of phosphors ... flat-screen televisions, computer monitors, and electronic displays.

Statement 2 is correct: Rare earth phosphors have now been extensively used in color television screens, computer monitors, fluorescent lighting, and medical X-ray photography. Rare-earth elements occur in nature in combination with phosphate ; In their oxides, most rare-earth elements only have a valence of 3 and form sesquioxides.

Phosphors in optical displays contain yttrium, europium, and terbium oxides. The windshield, mirrors, and lenses are polished using cerium oxides.

Links:

<https://www.irel.co.in/>

<https://www.usgs.gov/centers/national-minerals-information-center/rare-earths-statistics-and-information>

<https://www.britannica.com/science/rare-earth-element>

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' 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) 1, II and III

62. Answer: A

Explanation:

Statement 1 is incorrect: NRP targets a "future-ready" rail system by 2030, not 2028. The Plan is to create a 'future ready' Railway system by 2030. The NRP is aimed to formulate strategies based on both operational capacities and commercial policy initiatives to increase modal share of the Railways in freight to 45%.

Statement 2 is incorrect: Kavach is an indigenously developed system, not in collaboration with Germany. Kavach is an indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order (SIL-4).

Kavach aids the Loco Pilot in running of train within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also helps the trains to run safely during inclement weather

The first field trials on the passenger trains were started in February 2016. Based on the experience gained and Independent Safety Assessment of the system by Independent Safety Assessor (ISA), three firms were approved in 2018-19, for supply of Kavach Version 3.2.

Statement 3 is correct: Kavach uses RFID tags for train tracking. The "Kavach" train collision avoidance system in India utilizes RFID tags fitted on the track, particularly in station sections, to provide information to the locomotive's unit. These tags, along with unique Track Identification Numbers (TINs), help determine the direction of the train and contribute to the system's overall safety features.

Links:

<https://indianrailways.gov.in/>

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2082712>

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2082712&utm_source=chatgpt.com

Q63. Consider the following space missions :

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

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

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

(d) None

63. Answer: C

Explanation:

All three missions encourage microgravity-related research, especially in life sciences, materials, and docking.

Statement 1 is correct: The Ax-4 mission will “realize the return” to human spaceflight for India, Poland, and Hungary, with each nation’s first government-sponsored flight in more than 40 years. While Ax-4 marks these countries' second human spaceflight mission in history, it will be the first time all three nations will execute a mission on board the International Space Station.

Statement 2 is correct: SpaDeX mission is a cost-effective technology demonstrator mission for the demonstration of in-space docking using two small spacecraft launched by PSLV. This technology is essential for India's space ambitions such as Indian on Moon, sample return from the Moon, the building and operation of Bharatiya Antariksh Station (BAS), etc. In-space docking technology is essential when multiple rocket launches are required to achieve common mission objectives. Through this mission, India is marching towards becoming the fourth country in the world to have space docking technology.

Statement 3 is correct: Gaganyaan Programme, ISRO envisages to undertake human spaceflight missions to Low Earth Orbit (LEO) and to lay the foundation of technologies needed for an Indian human space exploration programme in the long run. The vision for space in the Amrit kaal envisages including other things, creation of an operational Bharatiya Antariksh Station by 2035 and Indian Crewed Lunar Mission by 2040.

Links:

<https://www.nasa.gov/mission/axiom-mission-4-ax-4/>

<https://www.isro.gov.in/SpaceDockingExperiment.html>

<https://www.isro.gov.in/Gaganyaan.html>

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

Aircraft type : Description

- I. Dornier-228 : Maritime patrol aircraft
- II. IL-76 : Supersonic combat aircraft
- III. C-17 Globe- : Military transport aircraft
master III

How many of the pairs given above are correctly matched?

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

64. Answer: B

Explanation:

Statement 1 is correct: Dornier 228 Maritime Patrol Aircraft is a Short Take-Off and Landing (STOL).

It is a multirole light transport aircraft used by the Indian Navy for electronic warfare missions, maritime surveillance, and disaster relief systems and has been in production since 1981.

Statement 2 is incorrect: IL-76 is a medium-range military transport aircraft, also known by the Nato codename 'Candid'. IL-76 is produced by the Ilyushin Aviation Complex Joint Stock Company in Moscow. The IL-76 is a subsonic aircraft with a cruising speed of around 850 km/h, far below the supersonic threshold (Mach 1, ~1235 km/h at sea level). **Supersonic combat aircraft in India’s fleet include the MiG-29, Su-30 MKI, and Rafale**, which are fighter jets designed for air combat and capable of exceeding Mach 1.

Statement 3 is correct: The C-17 Globemaster III is a highly versatile military transport aircraft used by the Indian Air Force (IAF) to bolster its strategic airlift capabilities. The IAF currently operates 11 C-17s, with the last one being inducted in December 2016, according to EurAsian Times.

Links:

<https://www.indiannavy.nic.in/content/dornier-228>

<https://indianairforce.nic.in/content/transport-aircraft>

<https://indianairforce.nic.in/content/c-17-globemaster-iii>

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

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

65. Answer: A

Explanation:

Option A is correct: Cloud seeding is undertaken by dispersing substances into the air that serve as cloud condensation or ice nuclei. Common agents include silver iodide, potassium iodide, and dry ice, with hygroscopic materials like table salt gaining popularity due to their ability to attract moisture. Techniques vary from static seeding, which encourages ice particle formation in supercooled clouds to increase precipitation, to dynamic seeding, designed to enhance convective cloud development through the release of latent heat.

Links:

<https://mausam.imd.gov.in/cloud-seeding-rain-enhancement.php>

<https://moes.gov.in/sites/default/files/Guidelines%20on%20Rain%20Enhancement%20Techniques.pdf>

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

66. Answer: A

Explanation:

Statement 1 is correct: The Supreme Court in cases like *Maru Ram v. Union of India* (1980) and *Epuru Sudhakar v. Government of A.P.* (2006) held that the President's power under Article 72 is subject to limited judicial review. Courts can intervene if the pardon is exercised arbitrarily, mala fide, or violates constitutional values.

Statement 2 is incorrect: Though Article 72 is silent, Article 74(1) mandates that the President shall act on the aid and advice of the Council of Ministers. This was reaffirmed in *Maru Ram* and *Kehar Singh v. Union of India* (1989).

Links:

Constitution of India, Articles 72 and 74.

Supreme Court judgments: Maru Ram v. Union of India (1980), Kehar Singh v. Union of India (1989), and Epuru Sudhakar v. Government of Andhra Pradesh (2006).

Constitutional Law of India by Dr. J.N. Pandey, which discusses the scope of Article 72 and judicial review.

Q67. Consider the following statements:

- I. On the dissolution of the House of the People, the Speaker shall not vacate his/her office until immediately before the first meeting of the House of the People after the dissolution.
- II. According to the provisions of the Constitution of India, a Member of the House of the People on being elected as Speaker shall resign from his/her political party immediately.
- III. The Speaker of the House of the People may be removed from his/her office by a resolution of the House of the People passed by a majority of all the then Members of the House, provided that no resolution shall be moved unless at least fourteen days' notice has been given 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

67. Answer: C

Explanation:

Statement 1 is correct: As per Article 94, the Speaker continues in office even after the Lok Sabha is dissolved, until just before the first meeting of the newly elected House. This ensures administrative continuity.

Statement 2 is incorrect: The Constitution does not mandate that a Speaker resign from their party. It's a matter of convention, not a constitutional requirement.

Statement 3 is correct: Under Article 94(c), the Speaker can be removed by an absolute majority of Lok Sabha members, with 14 days' prior notice.

Under what circumstances does the Speaker or Deputy Speaker vacate their office?

The Speaker or Deputy Speaker vacates their office if they cease to be a member of the Lok Sabha, resign by writing to the respective counterpart, or are removed by a resolution passed by the majority of Lok Sabha members.

What is the procedure for removing the Speaker or Deputy Speaker?

To remove the Speaker or Deputy Speaker, a resolution must be passed by a majority of all members of the Lok Sabha. A minimum of 14 days' notice must be provided before moving such a resolution.

Example

If a Speaker loses their Lok Sabha membership due to disqualification or resignation, their office is immediately vacated. Similarly, if a resolution with majority support is passed in the Lok Sabha, the Speaker or Deputy Speaker can be removed from their position.

Links:

Constitution of India, Articles 93, 94, and 100.

Rules of Procedure and Conduct of Business in Lok Sabha (Rule 200).

Introduction to the Constitution of India by D.D. Basu, which clarifies the Speaker's tenure and removal process.

Practice and Procedure of Parliament by M.N. Kaul and S.L. Shakdher, detailing the Speaker's role and conventions.

Q68. Consider the following statements:

- I. If any question arises as to whether a Member of the House of the People has become subject to disqualification under the 10th Schedule, the President's decision in accordance with the opinion of the Council of Union Ministers shall be final.
- II. There is no mention of the word 'political party' in the Constitution of India.

Which of the statements given above is/are correct?

- (a) I only

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

68. Answer: D

Explanation:

Statement 1 is incorrect: Under Paragraph 6(1) of the 10th Schedule, disqualification for defection is decided by the Speaker (or Chairman), not the President. The President is involved only in Article 102 disqualifications, acting on the Election Commission's advice – not the Council of Ministers. **Hence, the statement misplaces both authority and process.**

Statement 2 is incorrect: It is mentioned in 10th schedule. The term "political party" appears multiple times in the 10th Schedule, added by the 52nd Constitutional Amendment (1985). **So, the Constitution does mention it – though not in its original 1950 text.**

Links:

Constitution of India, 10th Schedule (Paragraph 6) and Article 103.

Kihoto Hollohan v. Zachillhu (1992), AIR 1993 SC 412, which clarifies the Speaker's role and judicial review under the 10th Schedule.

Introduction to the Constitution of India by D.D. Basu, covering the 10th Schedule and anti-defection provisions.

Text of the 52nd Amendment Act, 1985, which introduced the term "political party" in the Constitution.

Q69. Consider the following statements:

Statement I:

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

Statement II:

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

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

- (a) Both Statement I and 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

69. Answer: D

Explanation:

Statement 1 is incorrect: Under Section 15 of the MMDR Act, 1957, State Governments are empowered to make rules for regulating minor minerals, including granting leases and concessions. State governments do have the power to make rules for granting concessions for minor mineral extraction within their territories, as stipulated by the Mines and Minerals (Development and Regulation) Act, 1957.

Power of State Governments to make rules in respect of minor minerals. – (1) The State Government may by notification in the Official Gazette make rules for regulating the grant of quarry leases, mining leases or other mineral concessions in respect of minor minerals and for purposes connected therewith.

Statement 2 is correct: The central government has the power to notify "minor minerals" under section 3 (e) of the MMDR Act, 1957.

Links:

Mines and Minerals (Development and Regulation) Act, 1957, Sections 3(e) and 15.

State of Tamil Nadu v. Hind Stone (1981) 2 SCC 205, affirming State powers over minor minerals.

Amritlal Nathubhai Shah v. Union of India (1976) 4 SCC 108, clarifying the division of powers.

Ministry of Mines, Government of India, notifications under the MMDR Act for minor minerals.

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

70. Answer: A

Explanation:

The European Union (EU) has enacted the Nature Restoration Law to tackle climate change and biodiversity loss. This law aims to restore at least 20% of the EU's land and sea areas by 2030 and all ecosystems in need by 2050.

The Nature Restoration Law (NRL) is a landmark piece of environmental legislation passed by the European Union (EU) in 2024. It is the first continent-wide law that sets legally binding targets for restoring degraded ecosystems in Europe to tackle biodiversity loss, enhance climate change resilience, and secure ecosystem services such as clean air, water, and food.

Links:

https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3575

<https://www.europarl.europa.eu/news/en/press-room/20240221IPR18115/nature-restoration-law-meps-approve-deal-with-council>

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 statements 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

71. Answer: D

Explanation:

Fiscal Deficit = Total Expenditure - Total Receipts (excluding borrowings)

To determine which statements are correct, let's calculate the Revenue Deficit, Fiscal Deficit, and Primary Deficit based on the given data:

- Revenue Expenditure: ₹80,000 crores
- Revenue Receipts: ₹60,000 crores
- Borrowings: ₹10,000 crores
- Interest Payments: ₹6,000 crores

Step-by-Step Calculations:

1. Revenue Deficit:

- Revenue Deficit = Revenue Expenditure - Revenue Receipts
- Revenue Deficit = ₹80,000 crores - ₹60,000 crores = ₹20,000 crores
- **Statement 1 (Revenue deficit is ₹20,000 crores) is correct.**

2. Fiscal Deficit:

- Fiscal Deficit represents the total borrowing requirement of the government to meet its expenditure. It is typically calculated as:
 - $\text{Fiscal Deficit} = (\text{Revenue Expenditure} + \text{Capital Expenditure}) - (\text{Revenue Receipts} + \text{Non-Debt Capital Receipts})$
 - However, the question only provides borrowings (₹10,000 crores), which often equals the Fiscal Deficit in simplified scenarios, as borrowings cover the gap between total expenditure and total receipts.
 - Without specific capital expenditure or non-debt capital receipts provided, we assume borrowings reflect the Fiscal Deficit.
- **Given Borrowings = ₹10,000 crores, Fiscal Deficit = ₹10,000 crores.**
- **Statement 2 (Fiscal deficit is ₹10,000 crores) is correct.**

3. Primary Deficit:

- $\text{Primary Deficit} = \text{Fiscal Deficit} - \text{Interest Payments}$
- $\text{Primary Deficit} = ₹10,000 \text{ crores} - ₹6,000 \text{ crores} = ₹4,000 \text{ crores}$
- **Statement 3 (Primary deficit is ₹4,000 crores) is correct.**

Links:

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

72. Answer: A

Explanation:

The International North South Transport Corridor (INSTC) is a multinational transport corridor that connects India to Russia via Iran and Azerbaijan, utilizing a multi-modal network of roads, railways, and sea routes. This 7,200 km route aims to enhance trade and transport connectivity, offering a shorter and more cost-effective alternative to traditional routes for transporting goods between these regions.

- Start Point: Mumbai (India)
- Sea Route: Mumbai → Bandar Abbas (Iran)
- Land Route via Iran: Bandar Abbas → Tehran → Caspian Sea ports (e.g., Bandar Anzali)
- Caspian Sea Ship Route: Iran → Russia (Astrakhan port)
- Land Route via Russia: Astrakhan → Moscow → onward to Europe
- Founded in 2000 by India, Iran, and Russia
- **Later joined by several countries like Azerbaijan, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Ukraine, Belarus, and Oman.**



Links:

https://en.wikipedia.org/wiki/International_North%E2%80%93South_Transport_Corridor

Q73. Consider the following statements :

Statement I:

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

Statement II:

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

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

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

73. Answer: D

Explanation:

Statement 1 is incorrect: As per the U.S. Energy Information Administration (EIA), the USA is the world's largest producer of ethanol, followed by Brazil.

Statement 2 is correct: The USA predominantly uses corn, while Brazil uses sugarcane for ethanol production due to climate and agricultural differences.

Links:

<https://www.eia.gov/energyexplained/biofuels/ethanol-and-biodiesel.php>

https://www.niti.gov.in/sites/default/files/2021-06/EthanolBlendingInIndia_compressed.pdf

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

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

Select the correct answer using the code given below.

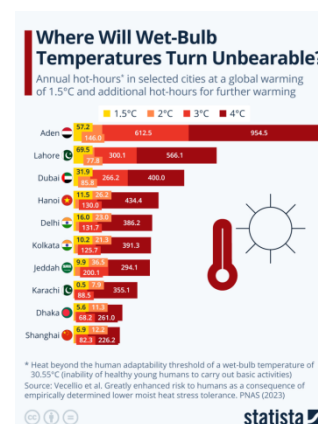
- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

74. Answer: C

Explanation:

Statement 1 is correct: Wet-bulb temperature of 35°C is considered the upper physiological limit of human survival, as the human body cannot cool itself by sweating.

Statement 2 is correct: It refers to broader climate events, partially directly to the physiological effects of wet-bulb temperature.



Links:<https://documents1.worldbank.org/curated/en/099920011222212474/pdf/P15743300f4cc10380b9f6051f8e7ed1147.pdf>

https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap11_FINAL.pdf

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 crores. What is the gross primary deficit?

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

75. Answer: A

Explanation:

To calculate the Gross Primary Deficit, we use the formula:

Primary Deficit = Fiscal Deficit - Interest Payments

Given Data:

- Fiscal Deficit: ₹50,000 crores
- Interest Liabilities (Interest Payments): ₹1,500 crores
- Non-debt creating capital receipts: ₹10,000 crores (not directly relevant for primary deficit calculation)
- **Calculation:**
- Primary Deficit = Fiscal Deficit - Interest Payments
- Primary Deficit = ₹50,000 crores - ₹1,500 crores = **₹48,500 crores**

Links:

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

- I. It has recommended grants of ₹ 4,800 crores from the year 2022-23 to the year 2025-26 for incentivizing States to enhance educational outcomes.
- II. 45% of the net proceeds of Union taxes are to be shared with States.
- III. ₹ 45,000 crores are to be kept as performance-based incentive for all States for carrying out agricultural reforms.
- IV. It reintroduced tax effort criteria to reward fiscal performance.

Select the correct answer using the code given below.

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

76. Answer: C

Explanation:

Statement 1 is correct: The 15th Finance Commission recommended a grant of ₹4,800 crores over four years (2022–23 to 2025–26) to incentivize states to improve educational outcomes. This grant is specifically aimed at supporting states in achieving better results in school education and is documented in the Commission's official report.

Statement 2 is incorrect: The 15th Finance Commission recommended that **41% (not 45%) of the net proceeds of Union taxes be shared with states for the period 2021–26**. This is a reduction from the 42% recommended by the 14th Finance Commission, with the 1% adjustment made to account for the creation of the Union Territories of Jammu & Kashmir and Ladakh.

Statement 3 is correct: The Commission recommended a performance-based incentive grant of ₹45,000 crores for states to undertake agricultural sector reforms. This is clearly stated in the official Press Information Bureau (PIB) release and the Finance Commission's own report.

Statement 4 is Correct: The 15th Finance Commission reintroduced the “tax effort” criterion in the horizontal devolution formula, assigning it a weight of 2.5%. This was done to reward states that make greater efforts to mobilize their own tax revenues, thereby encouraging fiscal responsibility and improved tax collection.

Links:

<https://fincomindia.nic.in/commission-reports-fifteenth>

<https://prsindia.org/policy/report-summaries/report-15th-finance-commission-2021-26>

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

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

77. Answer: C

Explanation:

Statement 1 is correct: The IBRD, a part of the World Bank Group, **primarily provides loans, credits, and guarantees to middle-income and creditworthy low-income countries to support development projects, policy reforms, and institutional strengthening.** Its focus is on countries with per capita income levels that classify them as middle-income or low-income but with sufficient creditworthiness to borrow on non-concessional terms (unlike the International Development Association, IDA, which focuses on the poorest countries with concessional financing). The IBRD also offers risk management products like guarantees to attract private investment. This statement is accurate in emphasizing middle-income countries, though it omits low-income creditworthy countries, which is a minor oversight in the context of the statement.

Statement 2 is incorrect: The IBRD's mission is to reduce poverty and promote sustainable development in developing countries, but it does **not work single-handedly**. The IBRD collaborates with other World Bank Group institutions (e.g., IDA, IFC, MIGA), governments, private sector entities, civil society, and other multilateral organizations like the IMF, UN agencies, and regional development banks. It provides financing, technical assistance, and policy advice, often in partnership with these entities, to achieve its goals. The term “single handedly” implies that the IBRD operates alone, which is inaccurate given its collaborative approach.

Statement 3 is correct: The IBRD was established in **1944** at the Bretton Woods Conference, with its initial purpose being to provide financing for the **reconstruction of Europe** and other regions devastated by World War II. Its first loans were directed toward post-war reconstruction, particularly in European countries like France and the Netherlands. Over time, as Europe recovered, the IBRD shifted its focus to development in developing countries, but its original mandate was indeed reconstruction.

Links:

<https://www.worldbank.org/en/who-we-are/ibrd>

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

78. Answer: A

Explanation:

Statement 1 is correct: In RTGS, the settlement time is instantaneous, while in NEFT, it takes some time to settle payments. RTGS (Real-Time Gross Settlement) processes transactions in real time, so settlement is instantaneous. NEFT (National Electronic Funds Transfer) settles transactions in half-hourly or batch intervals, so there is a delay in settlement.

Statement 2 is incorrect: In RTGS, the customer is charged for inward transactions, while that is **not the case for NEFT**. Banks do not charge customers for inward RTGS or NEFT transactions; charges, if any, are usually for outward transactions.

Statement 3 is incorrect: Operating hours for RTGS are restricted on certain days, **while this is not true for NEFT**. As per current guidelines, both RTGS and NEFT are available 24x7, 365 days a year, including weekends and bank holidays.

Links:

https://retail.onlinesbi.sbi/npersonal/neft_rtgs_faq.html

Q79. Consider the following countries :

- I. United Arab Emirates
- III. France
- III. Germany
- IV. Singapore
- V. Bangladesh

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

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

79. Answer: B

Explanation:

International merchant payments via UPI are enabled in UAE, France, and Singapore as of 2024–2025.

Bangladesh has remittance integration via NPCI, but not merchant payments.

Date: 31/10/2022
Real Time Gross Settlement System (RTGS) System
(Updated as on October 31, 2022)
1. What does RTGS stand for?
Ans. The acronym 'RTGS' stands for Real Time Gross Settlement, which can be explained as a system where there is continuous and real-time settlement of fund-transfers, individually on a transaction-by-transaction basis (without netting). 'Real Time' means the processing of instructions at the time they are received; 'Gross Settlement' means that the settlement of funds transfer instructions occurs individually.
2. Are the payments under RTGS final and irrevocable?
Considering that the funds settlement takes place in the books of the Reserve Bank of India (RBI), the payments are final and irrevocable.
3. What are the benefits of using RTGS?
Ans. RTGS offers many advantages for funds transfer:
<ul style="list-style-type: none"> • It is a safe and secure system for funds transfer. • RTGS transactions / transfers have no amount cap set by RBI. • The system is available on all days on 24x7x365 basis. There is real time transfer of funds to the beneficiary account • The remitter need not use a physical cheque or a demand draft. • The beneficiary need not visit a bank branch for depositing the paper instruments. • The beneficiary need not be apprehensive about loss / theft of physical instruments or the likelihood of fraudulent encashment thereof. • Remitter can initiate the remittances from his / her home / place of work using internet banking, if his / her bank offers such service. • The transaction charges have been capped by RBI.

List of countries where international merchant payments are accepted at select merchant outlets:

Sr.No	Country Name
1	Bhutan
2	France
3	Mauritius
4	Nepal
5	Singapore
6	Sri Lanka
7	UAE

Links:

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

80. Answer: D

Explanation:

Statement 1 is correct: Muft Bijli Yojana (also known as PM Surya Ghar) aims to install solar rooftop panels in 1 crore residential households.

Muft Bijli Yojana is a government scheme that aims to provide free electricity to households in India. The scheme was launched by Prime Minister Narendra Modi on February 15, 2024. Under the scheme, households will be provided with a subsidy to install solar panels on their roofs. The subsidy will cover up to 40% of the cost of the solar panels. The scheme is expected to benefit 1 crore households across India. It is estimated that the scheme will save the government Rs. 75,000 crore per year in electricity costs.

Statement 2 is correct: Ministry of New and Renewable Energy (MNRE) will provide training for technicians, installers, engineers, and other stakeholders like DISCOM and banking officials, as outlined in the skilling and capacity building guidelines issued in July 2024.

Statement 3 is correct: To create more than 3 lakh skilled manpower, through fresh skilling, and up-skilling, under scheme component of capacity building, out of which at least 1,00,000 will be Solar PV Technicians

Links:

<https://pmsuryaghar.gov.in/>

<https://pib.gov.in/PressReleasePage.aspx?PRID=2006272>

<https://cdnbbsr.s3waas.gov.in/s3716e1b8c6cd17b771da77391355749f3/uploads/2024/08/202408011911433006.pdf>

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

- I. An Ordinance can amend any Central Act.
- II. An Ordinance can abridge a Fundamental Right.
- III. An Ordinance can come into effect from a back date.

Which of the statements given above are correct?

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

81. Answer: C

Explanation:

Under **Article 123** of the Indian Constitution, the **President** can issue an **Ordinance** when **Parliament is not in session** and immediate legislative action is required. Ordinances have the **same force and effect** as a law passed by Parliament. Similarly, **Governors** can issue Ordinances under **Article 213** for their respective states.

Statement 1 is correct: Since an Ordinance is **equivalent to a Parliamentary law** when in force, it can **amend, repeal, or modify** an existing Central Act. There is **no legal restriction** stopping an Ordinance from altering laws already passed by Parliament. In the past, the **Indian Penal Code, Income Tax Act**, and even the **Banking Regulation Act** have been amended via ordinances. **However**, this is **subject to judicial review**, and the Ordinance must comply with the **Constitution**.

Statement 2 is incorrect: According to, **Article 13(2)** of the Constitution: "The State shall not make any law which takes away or abridges the rights conferred by this Part [Part III – Fundamental Rights]..." **Ordinances** are considered as '**law**' under **Article 13(3)(a)**. Therefore, they **must not violate Fundamental Rights**. If an Ordinance **infringes** or **curtails** a Fundamental Right, it can be **declared unconstitutional** by the courts. In *R.C. Cooper v/s Union of India (1970)* (Bank Nationalization case), the Supreme Court invalidated an Ordinance that violated the right to property (then a Fundamental Right). Ordinances **cannot abridge** Fundamental Rights.

Statement 3 is correct: Ordinances, like Parliamentary laws, **can have retrospective effect**, i.e., they can be made **effective from a date prior to the date of promulgation**. This is **not prohibited** under the Constitution. However, such retrospective operation must be **clearly stated** in the Ordinance and must not **violate Fundamental Rights** or **cause injustice**. Taxation ordinances or laws are often made **retrospective** to plug loopholes or clarify provisions.

Links:

<https://www.drishtijudiciary.com/ttp-constitution-of-india/Ordinance>

Q82. Consider the following pairs :

State Description

- I. Arunachal Pradesh : The capital is named after a fort, and the State has two National Parks

- II. Nagaland : The State came into existence on the basis of a Constitutional Amendment Act
- III. Tripura : Initially a Part 'C' State, it became a centrally administered territory 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

82. Answer: C

Explanation:

Statement 1 is correct: Itanagar, the capital and largest town of Arunachal Pradesh, houses the Legislative Assembly, government, and Gauhati High Court permanent bench in Naharlagun. Itafort, 'the fort of bricks' from which the state capital derives its name, is situated in the heart of Itanagar. The fort has an irregular shape, built mainly with bricks dating back to the 14th-15th century of Mayapur of Ramachandra, a king of the Jitari Dynasty.

National Parks in Arunachal Pradesh:

- 1. **Namdapha National Park** – Located in Changlang district, it is one of the richest areas in biodiversity in India.
- 2. **Mouling National Park** – Located in the Upper Siang district.

Statement 2 is correct: The Constitution (Thirteenth Amendment) Act, 1962, was enacted after an agreement between the Government of India and the Naga Peoples Convention in 1960, establishing Naga Hills-Tuensang Area (Nagaland) as a separate state in the Union of India. The Act outlines the Governor's responsibility for law and order, general responsibility for government funds, and ten-year administration of the Tuensang District. A Regional Council will be formed for the Tuensang District, consisting of elected representatives from the tribes. Acts of Parliament will not apply to Nagaland unless decided by the Nagaland Legislature.

Nagaland became the 16th state of India on 1 December 1963, created through the 13th Constitutional Amendment Act, 1962, and the State of Nagaland Act, 1962. Article 371A was inserted to provide special constitutional provisions for Nagaland due to its unique tribal culture and customs.

Statement 3 is correct: After independence, Tripura was classified as a Part 'C' State (administered by the President through a Chief Commissioner). With the States Reorganisation Act, 1956, the classification of Part A, B, and C states was abolished. Tripura became a Union Territory (centrally administered) from 1956. It attained full statehood under the North-Eastern Areas (Reorganisation) Act, 1971, and officially became a state on 21 January 1972.

Links:

<https://en.wikipedia.org/wiki/Itanagar>

<https://www.india.gov.in/my-government/constitution-india/amendments/constitution-india-thirteenth-amendment-act-1962>

<https://en.wikipedia.org/wiki/Tripura>

Q83. With reference to India, consider the following :

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

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

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

83. Answer: A

Explanation:

Statement 1 is correct: The Inter-State Council (ISC) is a body established under Article 263 of the Constitution to facilitate coordination and collaboration between the Union and the States. It's a recommendation body that investigates and discusses matters of common interest, makes recommendations for better policy coordination, and deliberates on general interest issues as referred by the Chairman.

Statement 2 is incorrect: The National Security Council (NSC) is an executive government body tasked with advising the prime Minister on matters of national security and foreign policy. It was established by the former prime minister Atal Bihari Vajpayee in November 1998, with Brajesh Mishra as the first National Security Advisor.

Statement 3 is incorrect: Zonal Councils are advisory bodies, established to promote cooperation and coordination between the Union government and the state governments, as well as between different states within a region. These councils are a mechanism for addressing issues of common interest, including economic and social planning, border disputes, and inter-state transport. They were created under the States Reorganisation Act, 1956, and are divided into five zones: Northern, Central, Eastern, Western, and Southern.

Links:

https://en.wikipedia.org/wiki/Inter-State_Council

https://en.wikipedia.org/wiki/Zonal_Councils_of_India

[https://en.wikipedia.org/wiki/National_Security_Council_\(India\)](https://en.wikipedia.org/wiki/National_Security_Council_(India))

Q84. Consider the following statements :

- I. 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

84. Answer: A

Explanation:

Statement 1 is correct: Article 163(1) of the Constitution says "There shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor in the exercise of his functions, **except in so far as he is by or under this Constitution required to exercise his functions in his discretion.**"

The Constitution **explicitly uses the word "discretion"** in regard to the Governor. In certain special cases, the Governor can act **without** the advice of the Council of Ministers (e.g., in recommending President's Rule under Article 356, or reserving a bill for the President under Article 200).

Statement 2 is incorrect: Article 200 of the Constitution provides that when a bill is passed by a State Legislature, it **must be presented to the Governor**. The Governor then has several options:

- Give assent.
- Withhold assent.

- Reserve the bill for the consideration of the **President**.

There is **no provision** in the Constitution for the **President to directly receive or act upon a bill from the State Legislature** without the Governor's involvement. The President **can consider a state bill only if it is reserved by the Governor**. The President **cannot suo motu (on their own)** act on a bill passed by the State Legislature.

Links:

<https://upgovernor.gov.in/en/page/constitutional-role-of-the-governor>

<https://indiankanoon.org/doc/1580975/>

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

85. Answer: C

Explanation:

Statement 1 is correct: Directive Principles of the State Policy: **Article 50** of the Constitution "The State shall take steps to separate the judiciary from the executive in the public services of the State."

Statement 2 is correct: Fundamental Duties: **Article 51A(f)** under **Part IVA – Fundamental Duties** "It shall be the duty of every citizen of India to value and preserve the rich heritage of our composite culture." This duty promotes **national integration** and respect for India's **diverse traditions**, encouraging every citizen to uphold cultural unity. **Fundamental Duties added** by the **42nd Amendment Act, 1976**, based on the recommendations of the **Swaran Singh Committee**.

Statement 3 is correct: Fundamental Rights: **Article 24** under **Part III – Fundamental Rights** "No child below the age of fourteen years shall be employed to work in any factory or mine or engaged in any other hazardous employment." It provides **protection against child labor** and ensures children are not exposed to harmful environments, enabling them to focus on education and growth.

Links:

<https://indiankanoon.org/doc/867010/>

<https://indiankanoon.org/doc/1540780/>

<https://www.mea.gov.in/images/pdf1/part4.pdf>

Q86. Consider the following statements :

With reference to the Constitution of India, if an area in a State is declared as Scheduled Area under the Fifth Schedule

- I. the State Government loses its executive power in such areas and a local body assumes total administration
- II. the Union Government can take over the total administration of such areas under certain

circumstances on the recommendations of the Governor

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

86. Answer: D

Explanation:

The Fifth Schedule, under Article 244(1) of the Constitution, outlines the framework for governing Scheduled Areas and the welfare of Scheduled Tribes in states other than Assam, Meghalaya, Tripura, and Mizoram (which are covered under the Sixth Schedule).

Statement 1 is incorrect: The president is empowered to declare an area to be a scheduled area. He can also increase or decrease its area, alter its boundary lines, rescind such designation or make fresh orders for such redesignation on an area in consultation with the governor of the state concerned.

The executive power of a state extends to the scheduled areas therein. But the governor has a special responsibility regarding such areas. He has to submit a report to the president regarding the administration of such areas, annually or whenever so required by the president. The executive power of the Centre extends to giving directions to the states regarding the administration of such areas.

Statement 2 is incorrect:

The Union Government does not take over the administration of Scheduled Areas. Its role is limited to giving directions to the state regarding administration, based on the Governor's reports.

Links:

<https://www.mea.gov.in/images/pdf1/s5.pdf>

Laxmikant Scheduled and Tribal Areas

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

Organization Union Ministry

- I. The National Automotive Board : Ministry of Commerce and Industry
- II. The Coir Board : Ministry of Heavy Industries
- III. The National Centre for Trade

Information : Ministry of Micro, Small and Medium Enterprises

How many of the above pairs are correctly matched :

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

87. Answer: D

Explanation:

Statement 1 is incorrect: The National Automotive Board (NAB) operates under the Ministry of Heavy Industries, not the Ministry of Commerce and Industry.

Statement 2 is incorrect: The Coir Board is a statutory body under the MSME Ministry, not the Ministry of Heavy Industries.

Statement 3 is incorrect: The National Centre for Trade Information (NCTI) comes under the Ministry of Commerce and Industry.

Links:

<https://heavyindustries.gov.in/national-automotive-board>

https://en.wikipedia.org/wiki/Coir_Board_of_India#:~:text=The%20board%20works%20for%20the,economically%20weaker%20sections%20of%20society.

<https://www.india.gov.in/information-national-centre-trade-information>

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 of 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

88. Answer: A

Explanation:

The provisions of the Constitution which are related to the federal structure of the polity can be amended by a special majority of the Parliament and also with the consent of half of the state legislatures by a simple majority. If some states take no action on the bill, it does not matter; the moment half of the states give their consent, the formality is completed. There is no time limit within which the states should give their consent to the bill.

The following provisions can be amended in this way:

- 1. Election of the President and its manner.
- 2. **Extent of the executive power of the Union and the states.**
- 3. Supreme Court and high courts.
- 4. Distribution of legislative powers between the Union and the states.
- 5. Goods and Services Tax Council
- 6. **Any of the lists in the Seventh Schedule.**
- 7. Representation of states in Parliament.
- 8. Power of Parliament to amend the Constitution and its procedure (Article 368 itself)

Amendments related to the conditions of the Governor's office (as outlined in Article 158) can be made by a simple majority of the Parliament. Specifically, Parliament can determine the Governor's emoluments, allowances, and privileges through a law passed by a simple majority.

Links:

Amendment chapter laxmikant

Q89. With reference to the Indian 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

89. Answer: D

Explanation:

Statement 1 is correct: Under Article 361(1) of the Indian Constitution: "The Governor shall not be answerable to any court for the exercise and performance of the powers and duties of his office or for any act done or purported to be done by him in the exercise of those powers." A Governor **cannot be questioned in court** for **official actions** taken during his/her tenure. This gives constitutional immunity to the Governor to function independently and protect the dignity of the office.

Statement 2 is correct: Under Article 361(2): "No criminal proceedings whatsoever shall be instituted or continued against the President or the Governor of a State in any court during his term of office." **Absolute immunity from criminal prosecution** during the term. Even pending proceedings are **put on hold** until their tenure ends.

Statement 3 is correct: Under Article 194(2): "No member of the Legislature of a State shall be liable to any proceedings in any court in respect of anything said or any vote given by him in the Legislature..." This ensures **freedom of speech in the State Legislature**. A member cannot be **sued or prosecuted** for **statements made inside the House**, even if they are controversial.

Links:

<https://www.iasgyan.in/daily-current-affairs/article-361>

Q90. Consider the following activities :

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

90. Answer: B

Explanation:

The Petroleum and Natural Gas Regulatory Board (PNGRB) is a statutory body created under the PNGRB Act, 2006. It regulates the downstream oil and gas sector in India.

PNGRB does not regulate exploration or production, only distribution, marketing, pipelines, and storage of petroleum products and natural gas.

Statement 1 is incorrect: Production of crude oil is an upstream activity (exploration and drilling). It is managed by the Ministry of Petroleum and Natural Gas (MoPNG) and the Directorate General of Hydrocarbons (DGH).

Statement 2 is correct: Refining, storage, and distribution of petroleum are downstream operations (after crude oil is extracted). PNGRB ensures fair access to infrastructure, safety, and standards in these areas.

Statement 3 is correct: PNGRB supervises licensing and fair practices in fuel marketing and retail (e.g., petrol pumps, LPG dealerships).

Statement 4 is incorrect: Production of natural gas is also an upstream activity and handled by the Ministry of Petroleum and Natural Gas (MoPNG) and the Directorate General of Hydrocarbons (DGH)

Links:

<https://pngrb.gov.in/eng-web/story.html>

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

91. Answer: B

Explanation:

In 1930, Mahatma Gandhi launched the Civil Disobedience Movement by breaking the Salt Law — a British monopoly on salt production. He undertook the historic Dandi March, walking 240 km from Sabarmati to Dandi, and on April 6, 1930, he picked up natural salt from the seashore, symbolically defying British rule. After this act, Gandhi and many others were arrested. During this time, Gandhi gave a bold and defiant statement: "Sedition has become my religion." He was emphasizing that resisting unjust colonial laws had become a sacred duty for him. Calling it his "religion" showed how deeply committed he was to non-violent civil disobedience. He was not afraid of punishment, and considered breaking such laws a moral responsibility.

Links:

<https://www.history.com/articles/gandhi-salt-march-india-british-colonial-rule>

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

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

92. Answer: C

Explanation:

The Dancing Girl is one of the most iconic and remarkable discoveries from the Indus Valley site of Mohenjo-daro. It is a bronze statue about 10.5 cm tall. The figurine depicts a young girl in a dancing posture, wearing bangles on her arms and a confident, natural pose. It was made using the "lost-wax casting" technique, which shows the advanced metallurgical skills of the Harappans around 2500 BCE.

Links:

[https://en.wikipedia.org/wiki/Dancing_Girl_\(prehistoric_sculpture\)](https://en.wikipedia.org/wiki/Dancing_Girl_(prehistoric_sculpture))

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

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

93. Answer: B

Explanation:

The Chauri Chaura incident occurred in February 1922 in Uttar Pradesh, where a group of protesters participating in the Non-Cooperation Movement clashed with the police. The angry mob set fire to a police station, resulting in the death of 22 policemen. In response, Mahatma Gandhi immediately called off the Non-Cooperation Movement, as he believed the movement had taken a violent turn, which he could not support.

After the incident, the British government arrested many people involved. Madan Mohan Malaviya, a prominent freedom fighter, educationist, and lawyer, volunteered to provide legal defence for those accused. Krishna Kant assisted him in the defence effort.

Links:

<https://theprint.in/theprint-profile/remembering-madan-mohan-malaviya-the-moderate-hindu-mahamana-who-founded-bhu/168856/>

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

94. Answer: A

Explanation:

The Poona Pact was signed in 1932 between Gandhiji and Dr. B.R. Ambedkar. It was related to separate electorates for the Depressed Classes (now Scheduled Castes) proposed in the Communal Award. Gandhiji strongly opposed the idea of separate electorates, fearing it would divide Hindu society. While in jail, he went on a fast unto death, and the resulting compromise was the Poona Pact. After this event, Gandhiji intensified his efforts for the upliftment of the Depressed Classes, whom he called Harijans (meaning "Children of God").

Links:

<https://www.constitutionofindia.net/historical-constitution/poona-pact-1932-b-r-ambedkar-and-m-k-gandhi/>

Q95. Consider the following fruits :

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

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

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

95. Answer: C

Explanation:

All three were introduced by the Portuguese to India during the 16th and 17th centuries.

Papaya: Native to tropical America (Mexico and Central America). Brought to India by the Portuguese in the 16th century.

Pineapple: Native to South America (Brazil, Paraguay). Portuguese introduced it to India during their maritime explorations.

Guava: Also native to Central and South America. Introduced by the Portuguese in the same time frame.

Many other fruits and vegetables like potato, chili, tomato, papaya, pineapple, guava, and cashew were brought to India by the Portuguese.

Links:

https://www.ripublication.com/ijhss/ijhssv5n3_07.pdf

Q96. Consider the following countries :

- I. United Kingdom
- II. Denmark
- III. New Zealand
- IV. Australia
- V. Brazil

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

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

96. Answer: B

Explanation:

This list ranks countries by total number of time zones on their territory, including dependent territories. France has the most time zones with 12 (including Antarctica claims).

Country	No. of time zones
United States	11
New Zealand	5
France	12
Mexico	4
Canada	6
United Kingdom	9
Brazil	4
Denmark	5
Antarctica	10
Kiribati	3
Indonesia	3
Australia	9
Russia	11

Question is about more than 4 time zone, so Brazil with 4 not included as question asked specifically about more than 4.

Links:

https://en.wikipedia.org/wiki/List_of_time_zones_by_country

Q97. Consider the following statements :

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

Which of the statements given above is/are correct?

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

97. Answer: A

Explanation:

Statement 1 is correct:

Anadyr (Siberia, Russia) and Nome (Alaska, USA) are close geographically but fall on opposite sides of the International Date Line (IDL).

Anadyr is in Russia's Far East Time Zone (UTC+12).

Nome is in Alaska Standard Time (UTC-9).

So even though they are geographically near, the time difference is about 21 hours.

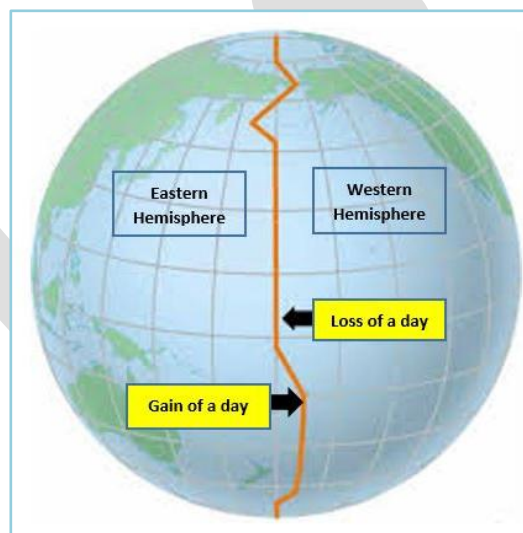
Statement 2 is incorrect:

Anadyr is ahead of Nome in time (by 21 hours).

So, when it's Monday in Anadyr, it would still be Sunday in Nome, not Tuesday.

Links:

<https://www.livescience.com/44292-international-date-line-explained.html>



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

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

98. Answer: A

Explanation:

The Self-Respect Movement was founded by E.V. Ramaswamy Naicker, also known as Periyar. He was a prominent social reformer and activist who spearheaded the movement in Tamil Nadu. The movement aimed to dismantle the existing Hindu social order and create a new society free from caste, religion, and god, promoting a rational and egalitarian society,

Links:

https://en.wikipedia.org/wiki/Self-Respect_Movement

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

99. Answer: C

Explanation:

Statement 1 is correct: Botswana is the world's leading producer of diamonds by value and the second largest producer by volume, after Russia. The country's diamond mines, including Orapa, Jwaneng, and Letlhakane, contribute significantly to its economy, accounting for a large portion of exports and GDP.

Statement 2 is correct: Chile has the largest lithium resources, accounting for over one-third of the world's total reserves. Specifically, Chile holds an estimated 9.3 million metric tons of lithium reserves. The Salar de Atacama, a large salt flat in Chile, is a significant source of lithium and is part of the larger Lithium Triangle; a region of South America comprising Argentina, Chile and Bolivia.

Statement 3 is correct: Indonesia is currently the largest source of nickel, holding approximately 20.6% of global nickel reserves and producing 1.72 million metric tons in 2023. This makes Indonesia the leading producer of nickel from mines worldwide, with a substantial share of global nickel production.

Links:

<https://www.thehindu.com/business/botswana-the-country-with-the-biggest-diamonds-gets-an-improved-10-year-deal-with-miner-de-beers/article69265986.ece#:~:text=Botswana%2C%20a%20sparsely%20populated%20and,to%20the%20International%20Monetary%20Fund.>

https://en.wikipedia.org/wiki/Lithium_Triangle

https://en.wikipedia.org/wiki/Nickel_mining_in_Indonesia

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

100. Answer: D

Explanation:

Statement 1 is incorrect: Mallorca, or Majorca, is the largest of the Balearic Islands, which are part of Spain, and the seventh largest island in the Mediterranean Sea.

Statement 2 is incorrect: Normandy is a region in France, specifically located in the northwest of the country. It is one of the eighteen regions of France.

Statement 3 is incorrect: Sardinia is part of Italy. It is an autonomous region of Italy, and the second largest island in the Mediterranean Sea.

Links:

<https://en.wikipedia.org/wiki/Mallorca>

<https://en.wikipedia.org/wiki/Normandy>

<https://en.wikipedia.org/wiki/Sardinia>