Meghalaya Civil Service (MCS) 2023

(Paper I (Series II) Answer key with Solutions, Solved by Damang Phawa)

1. International Chef Day is celebrated on

a) 20 November

b) 14 October

c) 20 October

d) 21 October

Solution: International Chef Day is celebrated on **20th October**. So, the correct answer is **c) 20th October**. This day was established in 2004 by the World Association of Cooks Societies (WACS) to recognize the contributions that chefs make to society. It is also a day for chefs to celebrate their profession and to promote culinary education and training.

2. The longest living root bridge in the world is located in

a) Mawkyrnot

b) Nohwet

c) Nongriat

d) Nongbareh

Solutions: The longest living root bridge in the world is located in Mawkyrnot. It's over 50 metres (160 ft) in length and can be accessed from either the village of Mawkyrnot or Rangthylliang. So, the correct answer is **a) Mawkyrnot**. These bridges are handmade from the aerial roots of rubber fig trees (Ficus elastica) by the Khasi and Jaiñtia peoples of the mountainous terrain along the southern part of the Shillong Plateau

3. Which country hosted the first ever FIFA World cup?

a) Italy

b) Uruguay

c) Brazil

d) England

Solution: The first ever FIFA World Cup was hosted by Uruguay. So, the correct answer is **b) Uruguay**. The tournament was organized by FIFA president Jules Rimet and took place in 1930, which was also the centenary of Uruguay's independence.

4. Which country is the new member of the BRICS New Development Bank (NDB)?

a) Italy

b) Egypt

c) Israel

d) Bangladesh

Solution: The new member of the BRICS New Development Bank (NDB) is Egypt. So, the correct answer is **b) Egypt**. The NDB admitted Bangladesh, United Arab Emirates (UAE) and Uruguay as its new members in September 2021. Egypt has now become a fourth new member to be admitted to BRICS NDB.

5. Which of the following organizations brings out the publication known as 'Ease of Doing Business'?

a) The United Nations Development Programme

b) The World Bank

c) The World Economic Forum

d) The International Monetary Fund

Solution: The 'Ease of Doing Business' report is published by The World Bank. So, the correct answer is **b) The World Bank**. This report provides a ranking of countries based on fixed parameters. It conducts an annual assessment of 190 economies, ranking them on how easy it is to do business in a country based on 10 parameters which span over the business life cycle.

6. Indian Army, along with which institution flight-tested Quick Reaction Surface to Air Missile (QRSAM) system?

a) ISRO

b) DRDO

c) BDL

d) HAL

Solution: The Quick Reaction Surface to Air Missile (QRSAM) system was flight-tested by the **Indian Army** along with the **Defense Research and Development Organization (DRDO)**. So, the correct answer is **b) DRDO**. The QRSAM is a missile developed by the DRDO, Bharat Electronics Limited and Bharat Dynamics Limited for the Indian Army. It is meant for protecting moving armoured columns from aerial attacks.

7. With reference to Jal Jeevan Mission (JJM), consider the following statements:

i. The mission focuses on recharge and reuse through grey water management and water conservation.

ii. The fund sharing pattern between the Centre and states is 50:50 for all states.

Which of the statements given above is / are correct?

a) i only

c) Both i and ii

b) ii only

d) Neither i nor ii

Solution: The correct answer is a) i only. Here's why:

i. The Jal Jeevan Mission (JJM) indeed focuses on recharge and reuse through grey water management and water conservation. It aims to create local infrastructure for rainwater harvesting, groundwater recharge and management of household waste water for reuse in agriculture. So, the first statement is **correct**.

ii. The fund sharing pattern between the Centre and states under JJM is not 50:50 for all states. It is 100% for Union Territories without legislature, 90:10 for North Eastern & Himalayan States and UTs with legislature, and 50:50 for rest of the States. So, the second statement is **incorrect**.

8. The "Tigray region" was in the news recently, is located in which of the following countries?

a) Somalia

b) South Sudan

c) Ethiopia

d) Yemen

Solution: The "Tigray region" is located in **Ethiopia**. So, the correct answer is **c) Ethiopia**. It is the northernmost regional state in Ethiopia and is the homeland of the Tigrayan, Irob, and Kunama people. Its capital and largest city is Mekelle.

9. Vistara is to merge with Air India by which Year?

a) 2022

b)2023

c) 2024

d) 2021

Solution: Vistara is expected to merge with Air India by **March 2024**. So, the correct answer is **c) 2024**. The merger is subject to regulatory approvals. Post the consolidation, Singapore Airlines (SIA) shall hold a 25.1% shareholding in Air India

10. Consider the following statements about Global warming?

i. Earth's temperature has risen by 0.08 degree Celsius per decade

ii. Water vapor is a greenhouse gas

iii. The Arctic has warmed nearly 4 times faster than the rest of the world over the past four decades.

Which of the following statements is/are correct?

a) ii only

b) i and ii only

c) i and iii only

d) i, ii and iii

Solution: The correct answer is **d) i, ii and iii**. Here's why:

i. Earth's temperature has indeed risen by an average of **0.08° Celsius per decade** since 1880. So, the first statement is **correct**.

ii. **Water vapor** is Earth's most abundant greenhouse gas. It's responsible for about half of Earth's greenhouse effect — the process that occurs when gases in Earth's atmosphere trap the Sun's heat. So, the second statement is **correct**.

iii. The Arctic has warmed nearly **four times faster** than the rest of the world over the past four decades. So, the third statement is **correct**.

11. The Kameng Hydropower station was re- cently developed in which of the following state?

a) Nagaland

b) Tripura

c) Arunachal Pradesh

d) Sikkim

Solution: The Kameng Hydropower Station was recently developed in **Arunachal Pradesh**. So, the correct answer is **c) Arunachal Pradesh**. The 600 MW Kameng hydropower project was developed by the state-owned North Eastern Electric Power Corporation (NEEPCO). It is situated in Arunachal Pradesh's West Kameng district.

12. Which body is responsible for flood forecasting in India?

a) Central Water Commission

b) India Meteorological Department

c) National Disaster Management Authority

d) State Water Commission

Solution: The body responsible for flood forecasting in India is the **Central Water Commission (CWC)**. So, the correct answer is **a) Central Water Commission**. The CWC is currently responsible for issuing flood forecasts at various stations, of which some are for river stage forecast and others for inflow forecast.

13. Consider the following statements regarding Climate Change Performance Index 2023.

i. The CCPI 2023 report analyses the climate performance of the European Union and 59 countries

ii. Assessment is based on 14 indicators only

iii. As per the report, India ranked at 10^{th} position

Which of the following statements is/are correct?

a) i only

b) i and ii only

c) ii and iii only

d) i, i and iii

Solution: The correct answer is **b) i and ii only**. Here's why:

i. The Climate Change Performance Index (CCPI) 2023 report does indeed analyze the climate performance of the **European Union and 59 countries**. So, the first statement is **correct**.

ii. The assessment is based on **14 indicators**. These indicators are spread across four categories: GHG Emissions (40% of the overall score), Renewable Energy (20%), Energy Use (20%), and Climate Policy (20%)12. So, the second statement is **correct**.

iii. As per the CCPI 2023 report, **India ranked 8th**, not 10th. So, the third statement is **incorrect**.

14. Consider the following match-

Cyclone	Country
A. Asani	i. Sri Lanka
B. Tej	ii. Bangladesh
C. Biparjoy	iii. India
D. Asna	iv. Pakistan

How many pairs given above is/are correctly matched?

a) None of the pairs

b) Only one pair

c) Only two pairs

d) All three pairs

Solution: According to IMD, Asani was a cyclone named by Sri Lanka, derived from the word "Asani" of Sinhala meaning "Wrath". Tej Cyclone in India, Biparjoy in Bangladesh and **Asna in Pakistan**. Hence, the correct option is **c) Two pairs**

15. The common glass used in making windows bottles and jars is known as

a) Quartz glass

b) Soda-lime glass

c) Pyrex glass

d) Fibre glass

Solution: The common glass used in making windows, bottles, and jars is known as **Soda-lime glass**. So, the correct answer is **b) Soda-lime glass**. This type of glass, also called soda-lime-silica glass, is the most prevalent type of glass and is used for a variety of purposes.

16. Asia's largest Compressed Bio Gas (CBG) plant is located in which state?

a) Punjab

b) Gujarat

c) Maharashtra

d) Uttar Pradesh

Solution: Asia's largest Compressed Bio Gas (CBG) plant is located in **Punjab**. So, the correct answer is **a) Punjab**. The plant was inaugurated in Lehragaga, Punjab. It was constructed at the cost of Rs.230 crore over 20 acres of land.

17. Consider the following regarding IUCN red list data.

i. Pygmy Hog

ii. Javan Rhinoceros

iii. Great Indian Bustard

iv. Siberian Crane

Which of the following are/is critically endangered species?

a) i and ii only

b) ii and iii only

c) i, ii and iii only

d) i, ii, iii and iv

Solution: The following species are listed as Critically Endangered on the IUCN Red List:

i. Pygmy Hog1 ii. Javan Rhinoceros2 iii. Great Indian Bustard3 iv. Siberian Crane2

So, the correct answer is **d) i, ii, iii, and iv**.

18. Consider the following statements regarding "The Trapping Zone"

i. Trapping Zone is being referred to as 'oasis of oceanic life.

ii. It is located 1000 meters beneath the surface in the Lakshadweep Islands

iii. The ecosystem presents a rich source of food for the larger predators like tuna, alfonsino, spiky, oreo and sharks.

Which of the following statements is/are correct?

a) i only

b) i and ii only

c)i and iii only

d) i, ii and iii

Solution: The correct answer is **c) i and iii only**. Here's why:

i. "The Trapping Zone" is indeed being referred to as an 'oasis of oceanic life'. So, the first statement is **correct**.

ii. "The Trapping Zone" is located **500 meters beneath the surface** in the **Indian Ocean**, specifically near the **Maldives**, not the Lakshadweep Islands. So, the second statement is **incorrect**.

iii. The ecosystem does present a rich source of food for larger predators like tuna, alfonsino, spiky oreo, and sharks. So, the third statement is **correct**.

19. ischemic heart disease is caused from exposure to what type of pollution?

a) Water Pollution

b) Air Pollution

c) Soil Pollution

d) Radioactive Pollution

Solution: ischemic heart disease is caused by exposure to **Air Pollution**. So, the correct answer is **b) Air Pollution**. Air pollution can cause ischemic heart disease by constricting blood vessels, increasing blood pressure and heart strain1. Exposure to increased concentrations of PM2.5 over a few hours to weeks can trigger cardiovascular disease-related heart attacks and death, while longer-term exposure can lead to an increased risk of cardiovascular mortality and decreases in life expectancy.

20. Consider the following statements.

i. Hurricanes are also referred to as "Tropical Cyclones" in the South Pacific and the Indian Ocean.

ii. They can rotate at a wind speed of about 65 miles per hour.

iii. Hurricane winds are more violent and stronger than Tornado winds.

Which of the following statements is/are correct?

a) i only

b) i and ii only

c) i and iii only

d) i, ii and iii

Solution: The correct answer is **a) i only**. Here's why:

i. Hurricanes are indeed referred to as “Tropical Cyclones” in the South Pacific and the Indian Ocean. So, the first statement is **correct**.

ii. To be classified as a hurricane, a tropical cyclone must have one-minute-average maximum sustained winds at 10 m above the surface of at least **74 mph (119 km/h)**, not 65 mph. So, the second statement is **incorrect**.

iii. Tornado wind speeds can reach up to **300 mph**, while a hurricane’s winds range from **75-200 mph**. This means tornado winds can be more violent and stronger than hurricane winds. So, the third statement is **incorrect**.

21. Kaziranga National Park was declared as a UNESCO World Heritage Site in which year?

a) 1975

b) 1980

c) 1985

d) 1989

Solution: Kaziranga National Park was declared a UNESCO World Heritage Site in the year **1985**. So, the correct answer is **c) 1985**.

22. The Blue Duke as recently seen in the news is a state butterfly of which State, as declared on the occasion of World Environment Day, 2022?

a) Uttarakhand

b) Arunachal Pradesh

c) Sikkim

d) Assam

Solution: The Blue Duke was declared as the state butterfly of **Sikkim** on the occasion of World Environment Day, 2022. So, the correct answer is **c) Sikkim**.

23. Consider the statements regarding RTIS (Real Time Train Information System) as seen recently in the news?

i. It is a joint collaboration between Indian Railways and Information Technology Development Agency

ii. It comprising of GPS Aided Geo-Augmented Navigation System (GAGAN)

iii. Using this technology train control will be able to track the speed of RTIS-enabled train more closely without any manual intervention. Which of the following statements is/are correct?

a) i only

b) i & ii only

c) ii & iii only

d) ii only

Solution: The correct answer is **c) ii & iii only**. Here's why:

i. The Real-Time Train Information System (RTIS) is a joint collaboration between the **Indian Railways and the Indian Space Research Organization (ISRO)**, not the Information Technology Development Agency. So, the first statement is **incorrect**.

ii. RTIS does indeed comprise the **GPS Aided Geo-Augmented Navigation System (GAGAN)**. This system captures the loco/train position. So, the second statement is **correct**.

iii. Using RTIS technology, train control will indeed be able to track the location and speed of RTIS-enabled trains more closely **without any manual intervention**. So, the third statement is **correct**.

24. Which of the following are associated with Web 3.0?

i. Smart Applications

ii. Live-streams

iii. Semantic Web

iv. Block chain services

a) i, ii & iv only

b) i, ii & iii only

c) i, iii & iv only

d) i, ii, iii & iv

Solution: The correct answer is **d) i, ii, iii & iv**. Here's why:

i. **Smart Applications**: Web 3.0 is indeed associated with smart applications. It uses technologies such as artificial intelligence and machine learning to provide a more personalized web experience. So, the first statement is **correct**.

ii. **Live-streams**: Web 3.0 can handle streaming data. Technologies like HLS.js, a JavaScript library, can play HTTP Live Streaming (HLS) in browsers. So, the second statement is **correct**.

iii. **Semantic Web**: Web 3.0 is also known as the Semantic Web. It uses artificial intelligence and machine learning technologies to provide information in a more human-like way. So, the third statement is **correct**.

iv. **Blockchain Services**: Web 3.0 is based on blockchain technology. It includes cryptocurrencies, NFTs, DAOs, decentralized finance, and more. So, the fourth statement is **correct**.

25. Consider the following communication technologies:

i. Closed-circuit Television

ii. Radio Frequency Identification

iii. Wireless Local Area Network

Which of the above are considered of the Short-Range devices / technologies?

a) i and ii only

b) and iii only

c) i and iii only

d) i, ii and iii

Solution: The following communication technologies are considered Short-Range devices/technologies:

i. **Closed-circuit Television (CCTV)**: CCTV systems can have a wide transmission range, usually close to 450 feet (about 137 meters) in open space with a clear line of sight between the camera and receiver. However, some CCTV systems, particularly those used for video magnifiers, offer a magnification range of 1.5x to 22x when used as a handheld magnifier, or 4.5x, 6x, 9x, and 12x when used as a stand magnifier.

ii. **Radio Frequency Identification (RFID)**: The range of RFID tags can vary depending on the frequency and type of tag. Low-frequency RFID tags have a range of up to 10 cm, high-frequency RFID tags have a range of up to 1 meter, and ultra-high-frequency RFID tags have a range of 10 to 15 meters.

iii. **Wireless Local Area Network (WLAN)**: WLANs can cover a larger area than LANs, allowing for greater device connectivity and flexibility. The range of a WLAN can easily be extended by adding one or more repeaters. However, the range of an access point is about 20 m (66 ft) indoors, while some access points claim up to a 150 m (490 ft) range outdoors.

So, the correct answer is **d) i, ii and iii**.

26. In the context of vaccines manufactured to prevent COVID-19 pandemic, consider the following statements:

i. The Serum Institute of India produced COVID-19 vaccine named Covishield using mRNA platform.

ii. Sputnik V vaccine is manufactured using vector-based platform.

iii. COVAXIN is an inactivated pathogen-based vaccine. 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

Solution: The correct answer is **b) ii and iii only**. Here's why:

i. The Serum Institute of India produced the COVID-19 vaccine named Covishield using the **viral vector platform**, not the mRNA platform. In the vaccine, a chimpanzee adenovirus – ChAdOx1 – has been modified to enable it to carry the COVID-19 spike protein into the cells of humans. So, the first statement is **incorrect**.

ii. Sputnik V vaccine is indeed manufactured using a **vector-based platform**. It is based on the human adenoviral vector-based platform. So, the second statement is **correct**.

iii. COVAXIN is indeed an **inactivated pathogen-based vaccine**. It is developed with Whole-Virion Inactivated Vero Cell-derived technology. So, the third statement is **correct**.

27. The browning of proteins when expose to heat is as a result of

a) Maillard reaction

b) Protein Bonding

c) Caramelization

d) Protein Denaturation

Solution: The browning of proteins when exposed to heat is a result of the **Maillard reaction**. This process begins when foods are heated above 285 degrees Fahrenheit and involves proteins on the surface of food combining with sugars, which causes browning and develops flavors. Therefore, the correct option is **a) Maillard reaction**.

28. Consider the following statements about Enzymes.

i. Enzymes are proteins made from amino acid stringed together in a very specific and unique order.

ii. Enzymes are sensitive to acidity and alkalinity but not to temperature.

iii. Trypsin is a type of enzyme produce in the stomach

Which of the following statement is/are correct?

a) i only
b) i and ii only
c) ii and iii only
d) i, ii and iii

Solution: The statements about enzymes are as follows:

i. **Enzymes are proteins made from amino acid stringed together in a very specific and unique order.** This statement is **correct**. Enzymes are indeed proteins that are made up of hundreds and thousands of amino acids stringed together in a very specific and unique order.

ii. **Enzymes are sensitive to acidity and alkalinity but not to temperature.** This statement is **incorrect**. Enzymes are sensitive to both acidity and alkalinity, as well as temperature. They need the right conditions to work properly. If the environment is too acidic or basic, or if the temperature is too high or too low, enzymes can change shape and lose their ability to function properly.

iii. **Trypsin is a type of enzyme produced in the stomach.** This statement is **incorrect**. Trypsin is a digestive enzyme that helps us digest protein, but it is produced by the pancreas, not the stomach. It is produced in an inactive form called trypsinogen and is activated in the small intestine5.

So, only the first statement is correct. The second and third statements are incorrect. The correct option is **a) i only**

29. Beri Beri is a disease which is caused as a result of which deficiency?

a) Cyanocobalamin

b) Riboflavin

c) Thiamine

d) Retinol

Solution: Beri Beri is a disease caused by a deficiency of **thiamine**, also known as **vitamin B1**. It often occurs in people with a diet that consists mostly of white rice or highly refined carbohydrates. In developed nations with easy access to these foods, the main cause of beriberi is alcohol use disorder. Alcohol makes it more difficult for the body to process and absorb thiamine. Beriberi can cause severe and even life-threatening symptoms.

30. Which instrument is used to measure the depth of water?

a) Fathometer

b) Galvanometer

c) Altimeter

d) Tube Tester

Solution: The **Fathometer** is an instrument used to measure the depth of water. It uses echo sounding to measure the depth of the ocean or any other water bodies. The device transmits sound waves through the water which, upon striking the bottom, return as an echo. This echo is received and analyzed by the hydrophone echo receiver to give the depth of water. The Fathometer is more useful compared to conventional instruments to measure the depth because it can be used in bad weather and is more accurate with only an error of ± 7 cm.

31. Consider the following statements about MARS, an alert and response system promoted by UN Environment Programme.

i. (MARS) was launched at the 27th Conference of Parties held in Egypt.

ii. It is a satellite-based system that enables governments to detect methane emissions iii. As per the report methane contributes about 10% to Global warming.

Which of the following statements are correct?

a) i and iii only

b) i and ii only

c) ii and iii only

d) i, ii and iii

Solution: The statements about the Methane Alert and Response System (MARS) are as follows:

i. **(MARS) was launched at the 27th Conference of Parties held in Egypt.** This statement is **correct**. The Methane Alert and Response System (MARS) was indeed launched at the 27th Conference of Parties (COP27) to the United Nations Framework Convention on Climate Change in Sharm El-Sheikh, Egypt12.

ii. **It is a satellite-based system that enables governments to detect methane emissions.** This statement is **correct**. MARS is a satellite-based system that allows governments and companies to identify and handle methane leaks31.

iii. **As per the report methane contributes about 10% to Global warming.** This statement is **incorrect**. Methane is a powerful greenhouse gas and is the second-largest contributor to climate warming after carbon dioxide (CO_2). Over the first two decades after its release, methane is more than 80 times more

potent than carbon dioxide in terms of warming the climate system45. Methane is responsible for more than 25 per cent of the warming we are experiencing today6.

So, the first and second statements are correct, but the third statement is incorrect. Correct Option is **b) i and ii only**

32. Which Acid is predominantly present in Tomatoes?

a) Tartaric acid

b) Malonic acid

c) Acetic Acid

d) Oxalic acid

Solution: Tomatoes contain about ten different types of acids, including citric acid, malic acid, ascorbic acid, and oxalic acid. However, the predominant acid present in tomatoes is **oxalic acid**. Tomatoes have an oxalic acid level of roughly 50 mg per 100 g serving.

33. Basalt is an example of which type of rock?

a) Sedimentary Rock

b) Igneous Rock

c) Metamorphic rock

d) 35:65 mixture of Sedimentary and Metamorphic Rock.

Solution: Basalt is an example of an **extrusive igneous rock**. It is formed from the rapid cooling of low-viscosity lava rich in magnesium and iron (mafic lava) exposed at or very near the surface of a rocky planet or moon. More than 90% of all volcanic rock on Earth is basalt. Rapid-cooling, fine-grained basalt is chemically equivalent to slow-cooling, coarse-grained gabbro.

34. Which of the following waves are first detected on a seismogram during an earthquake?

a) R wave or Rayleigh Wave

b) S- Wave or Shear/ Surface Wave

c) P wave or Primary wave

d) L Wave or Love wave

Solution: The **P-waves**, also known as primary waves, are the first to be detected on a seismogram during an earthquake. They are the fastest seismic waves and can travel through gases, liquids, or solids. The

next set of seismic waves on the seismogram will be the S-waves, which are usually bigger than the P waves, and have higher frequency.

35. Occurrence of Hailstorms is due to what?

a) Condensation

b) Freezing

c) Convection

d) Sublimation

Solution: Hailstorms occur when raindrops are carried upward by a storm into extremely cold areas of the atmosphere and freeze. Hail is associated with high, vertical cumulonimbus clouds, the kind of clouds that produce severe thunderstorms. Within a cumulonimbus cloud, ice particles develop from supercooled water. The particles fall toward the bottom of the cloud from the pull of gravity, but they are forced back up by powerful updrafts of air within the clouds. Hailstones continue to grow when they collide with water droplets that freeze onto the hailstone's surface.

Hail is produced in strong convective storms with long-lasting deep clouds that have large amounts of moisture and intense currents of rising air. Hailstorms over India are usually a summer phenomenon or limited to mountainous regions. This is because strong convective storms form when the air is lifted by multiple mechanisms including higher temperatures (in summer), mechanical rising (over mountains). The lifting of air (convection) causes unstable air, which is one of the main factors leading to the formation of a storm. Convective storms allow for hailstones to grow as the hailstones repeatedly rise and fall within the cloud by moving between regions of rising and falling air.

Hailstorms are not specifically caused by western disturbances (WD), but rather by sufficiently intense convection. Winter hailstorms are a rare phenomenon as the winter season is usually too cold for hail forming strong convection. Current weather models can predict the strong convective storms over India but most models may not be able to predict the exact location of localized hail precipitation.

37. Which of the following is a cold current of the Pacific Ocean?

a) Labrador Current by Canary Current

c) Okhotsk Current

d) Falkland Current

Solution: The **Okhotsk Current** is a cold current of the Pacific Ocean. It flows through the Bering Strait in a southerly direction, transporting the cold water of the Arctic Sea into the Pacific Ocean. Near 50-degree latitudes, one branch moves eastward and merges with the Aleutian & Kuroshio Current, and the second branch moves up to the Japanese coasts. So, the correct answer is **c) Okhotsk Current**.

38. Equatorial low-pressure belts are also referred to as

a) Horse latitudes

b) Furious fifties

c) Roaring forties

d) Doldrums

Solution: The Equatorial low-pressure belts are also referred to as **d) Doldrums** This belt happens to be the zone of convergence of trade winds from two hemispheres from sub-tropical high-pressure belts. This belt is also called the Doldrums, because of the extremely calm air movements. The position of the belt varies with the apparent movement of the Sun.

38. "Considering the following statements regarding Continental Rise-

i. It is found between the Continental slope and Abyssal Plains

ii. It is made up of sediments deposited by the Earth's rivers and streams

iii. The Depth of continental rise ranges from 4000-5000 metres

iv. It is formed due to Mass Wasting" Which of the following statements are correct?

a) i and ii only

b) ii and iii only

c) i, ii and iv only

d) i, ii, iii and iv

Solution: The statements about the Continental Rise are as follows:

i. **It is found between the Continental slope and Abyssal Plains.** This statement is **correct**. The continental rise is a low-relief zone of accumulated sediments that lies between the continental slope and the abyssal plain.

ii. **It is made up of sediments deposited by the Earth's rivers and streams.** This statement is **incorrect**. The continental rise is made up of silts, mud, and sand, deposited by turbidity flows. It is formed from sediment deposition, mainly due to mass wasting, the gravity-driven downhill motion of sand and other sediments.

iii. **The Depth of continental rise ranges from 4000-5000 metres.** This statement is **correct**. The continental rise merges with the continental slope at a depth of roughly 4,000 to 5,000 metres (13,000 to 16,500 feet).

iv. **It is formed due to Mass Wasting.** This statement is **correct**. The continental rise is formed from sediment deposition, mainly due to mass wasting, the gravity-driven downhill motion of sand and other sediments.

So, the correct answer is **d) i, iii, and iv**.

39. Which of the following Statements are true regarding Coral reefs?

i. They are Plant species

ii. They use sunlight for photosynthesis and thrive at temperature varying from 25-35 degree Celsius

iii. They are formed by huge colonies of corals that secrete hard calcareous (aragonite) exoskeletons that give them structural rigidity

iv. Atolls is a type of coral reef formation

a) i and ii only

b) i, ii and iii only

c) ii, iii and iv only

d) i, ii, iii and iv

Solution: The statements about coral reefs are as follows:

i. **They are Plant species.** This statement is **incorrect**. Coral reefs are not plant species. They are underwater ecosystems built by colonies of tiny animals known as coral polyps.

ii. **They use sunlight for photosynthesis and thrive at temperature varying from 25-35 degree Celsius.** This statement is **partially correct**. Coral reefs do rely on sunlight for photosynthesis, but not the corals themselves. The corals have a symbiotic relationship with zooxanthellae, a type of algae that lives in the coral tissues and performs photosynthesis providing nutrients to the coral. As for the temperature, coral reefs generally thrive in water temperatures of 20-32 degrees Celsius.

iii. **They are formed by huge colonies of corals that secrete hard calcareous (aragonite) exoskeletons that give them structural rigidity.** This statement is **correct**. Coral reefs are indeed formed by colonies of coral polyps that secrete a hard exoskeleton made of calcium carbonate (aragonite).

iv. **Atolls is a type of coral reef formation.** This statement is **correct**. Atolls are a type of coral reef that forms when a coral reef grows around a sinking volcanic island. The island eventually disappears below the water surface, leaving a ring of growing coral with an open lagoon in its center.

So, only the third and fourth statements are completely correct, and the second statement is partially correct. Hence, Correct option is **c) ii, iii and iv**

40. Identify the state in India through the following characteristics?

i. It is located between 26.28°N and 29.30° N latitude and 91.20° E and 97.30° E longitude

ii. It has the highest diversity of mammals and birds in India

iii. It has the longest connecting river bridge in India

a) Arunachal Pradesh

b) Himachal Pradesh

c) Sikkim

d) Uttarakhand

Solution: The state in India that fits all the given characteristics is **Arunachal Pradesh**. It is located between 26.28°N and 29.30° N latitude and 91.20 E and 97.30 E longitude. Arunachal Pradesh has a rich diversity of mammals and birds. The state also has the longest connecting river bridge in India, the Bhupen Hazarika Setu.

41. Which of the following rivers flow into Arabian Sea?

i. Narmada

ii. Tapi

iii. Mahanadi

iv. Godavari

a) i only

b) i, ii and iii only

c) i and ii only

d) ii and iii only

Solution: The rivers that flow into the Arabian Sea are:

i. **Narmada**: The Narmada River flows westwards over a length of 1,312 km before draining through the Gulf of Khambhat into the Arabian Sea1.

ii. **Tapi**: The Tapi River is one of only three rivers in peninsular India that run from east to west. It flows for about 724 km before out falling into the Arabian Sea through the Gulf of Cambay2.

iii. **Mahanadi**: The Mahanadi River flows slowly for 900 kilometres (560 mi) and ultimately empties into the Bay of Bengal, not the Arabian Sea3.

iv. **Godavari**: The Godavari River flows east for 1,465 kilometres (910 mi), draining the states of Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh, and Odisha. The river ultimately empties into the Bay of Bengal through an extensive network of distributaries, not the Arabian Sea4.

So, only the Narmada and Tapi rivers flow into the Arabian Sea. So option **c) i and ii only is the correct option**

42. Consider the following climatic characteristics:

i. They have warm moist summer and a cool, dry winter

ii. The mean monthly temperature varies between 4° C and 25° C and strongly modified by maritime influence.

iii. Rainfall ranges from 60cm to 150cm.

iv. In summer tropical cyclones also occur.

Select the correct climatic type which possesses the above characteristics using the codes given below:

a) Mediterranean

b) Tropical Monsoon

c) West European type

d) China type

Solution: The climatic type that matches all the given characteristics is the **d) China type**. This climate is characterized by a warm, moist summer and a cool, dry winter. The mean monthly temperature varies between 4° C and 25° C and is strongly modified by maritime influence. The rainfall ranges from 60cm to 150cm, and in summer, tropical cyclones also occur.

43. Which of the following have the highest Albedo?

a) Snow

b) Water

c) Grass

d) Clouds

Solution: The highest albedo, or reflectivity of sunlight, is found in **a) Snow**. The albedo of fresh snow can be as high as 95% (0.95), meaning it reflects 95% of the sunlight that hits it. This is higher than the albedo of water, grass, and clouds.

44. "With reference to Indian history, consider the following pairs:

Socio Religious Reformers	Movement
i. Raja Ram Mohan Roy-	Arya Samaj

ii. Swami Dayanand Saraswati — Deoband Movement

iii. Annie Besant's — The Theosophical Movement"

How many pairs are correct?

a) None of the pairs
b) Only one pair
c) Only two pairs
d) All three pairs

Solution: The pairs are as follows:

i. **Raja Ram Mohan Roy** - **Arya Samaj**: This pair is **incorrect**. Raja Ram Mohan Roy was one of the founders of the Brahmo Sabha in 1828, the precursor of the Brahmo Samaj, a social-religious reform movement in the Indian subcontinent.

ii. **Swami Dayanand Saraswati** - **Deoband Movement**: This pair is **incorrect**. Swami Dayanand Saraswati was the founder of the Arya Samaj, a Hindu reform movement. He was not associated with the Deoband Movement.

iii. **Annie Besant** - **The Theosophical Movement**: This pair is **correct**. Annie Besant was a prominent member of the Theosophical Society and became its president in 1907.

So, only the third pair is correct. So, option **b) Only One pair is correct**

45. The Mauryan Empire ended in the 187 B.C.E during the reign of which king?

a) Brihadratha

b) Bindusara

c) Dasharatha

d) Devavarman

Solution: The Mauryan Empire ended in 187 B.C.E during the reign of **a) Brihadratha**. He was the last ruler of the Mauryan dynasty. His reign ended when he was assassinated by his commander in chief, Pushyamitra, who then founded the Shunga dynasty.

46. The Chinese Pilgrim Fahien visited India during which the reign of which king?

a) Samudragupta

b) Srigupt

c) Chandragupta 1

d) Chandragupta II

Solution: The Chinese Pilgrim Fahien visited India during the reign of **d) Chandragupta II**. He was on a religious mission and traveled by foot from China to India.

47. Considered the following statements during the Palaeolithic Age-

i. People were food gatherers, ate wild fruits and vegetables, and lived on hunting

ii. Fire was discovered by rubbing two stones. iii. Domestication of animals such as; wild ancestor of the dog started. Which of the following statements is/are correct?

a) i only

b) i and ii only

c) i, ii and iii

d) None of the above

Solution: The statements about the Palaeolithic Age are as follows:

i. **People were food gatherers, ate wild fruits and vegetables, and lived on hunting.** This statement is **correct**. During the Paleolithic Age, people were indeed food gatherers. They hunted buffalo, bison, wild goats, reindeer, and other animals, depending on where they lived1. Along coastal areas, they fished. These early people also gathered wild nuts, berries, fruits, wild grains, and green plants.

ii. **Fire was discovered by rubbing two stones.** This statement is **correct**. The controlled use of fire was likely an invention of our ancestor Homo erectus during the Early Stone Age (or Lower Paleolithic). The earliest evidence of fire associated with humans comes from Oldowan hominid sites in the Lake Turkana region of Kenya. Evidence for the “microscopic traces of wood ash” as controlled use of fire by Homo erectus, beginning some 1,000,000 years ago, has wide scholarly support.

iii. **Domestication of animals such as; wild ancestor of the dog started.** This statement is **incorrect**. The first attempts at domestication of animals and plants were made during the Mesolithic Period. The first animal to be domesticated was the dog which started in Central Asia. The earliest evidence of domestication of animals comes from Adamgarh (M.P.) and Bagor in Rajasthan dated 5500 B.C. and 4500 B.C. respectively.

So, only the first and second statements are correct. The correct answer is **b) i and ii only**.

48. Consider the following statements.

i. Battle of Plassey was fought between Siraj- Ud-Daulah who was then the Bengal Nawab and East India Company forces headed by Robert Clive.

1. The Battle of Plassey took place in 23rd June 1750

iii. Mir Jafar the Commander-in-Chief of Nawab's army betrayed Siraj-Ud-Daulah during the battle

iv. The Battle of Plassey mark the beginning of British rule in India.

Which of the following statements are correct?

a) i and ii only

b) i, ii and iii only

c) i, iii and iv only

d) All of the above

Solution: The statements are as follows:

i. **Battle of Plassey was fought between Siraj- Ud-Daulah who was then the Bengal Nawab and East India Company forces headed by Robert Clive.** This statement is **correct**.

ii. **The Battle of Plassey took place on 23rd June 1750.** This statement is **incorrect**. The Battle of Plassey took place on 23rd June 1757.

iii. **Mir Jafar the Commander-in-Chief of Nawab's army betrayed Siraj-Ud-Daulah during the battle.** This statement is **correct**.

iv. **The Battle of Plassey marked the beginning of British rule in India.** This statement is **correct**.

So, the correct answer is **c) i, iii and iv only**.

49. Which of the followings Veda in Indian literature is considered as the root of the Indian classical music and dance?

a) Rig Veda

b) Yajurveda

c) Samaveda

d) Atharvaveda

Solution: The **c) Samaveda** is considered the root of Indian classical music and dance. The Samaveda is categorized into two parts – one includes melodies called Gana (gramageya and aranyageya) and the second includes a book called Archika (purvachika and uttarachika). Both the well-organized classical music and the classical dance traditions consider Samaveda to be the root of their melodies and rhythms.

50. Treaty of Versailles is associated with

a) The Korean War (1950-1953)

b) World War II (1939-1945)

c) The Mexican-American War (1846-1848)

d) World War I (1914-1918)

Solution: The Treaty of Versailles is associated with **d) World War I (1914-1918)**. It was a peace treaty signed on 28th June 1919, marking the end of World War I1. The treaty ended the state of war between Germany and most of the Allied Powers.

51. Match the following columns

Vice Roy of India	Events
A. Lord Willingdon	i. Vernacular Press Act
B. Lord Chelmsford	ii. Swadeshi Movement
C. Lord Minto II	iii. Poona Pact
D. Lord Ripon	iv. Rowlatt Act

Code:	A	B	C	D
a)	i	ii	iv	iii
b)	i	iv	iii	ii
c)	iii	iv	i	ii
d)	iii	iv	ii	i

Solution: The correct matches between the Viceroys of India and the events during their tenure are:

A. Lord Willingdon - iii. Poona Pact

B. Lord Chelmsford - iv. Rowlatt Act

C. Lord Minto II - ii. Swadeshi Movement

D. Lord Ripon - i. Vernacular Press Act

Hence the Correct option is d) iii iv ii i

52. "Swaraj is my birthright and I shall have it." These words were uttered by

a) Mahatma Gandhi

b) Lala Lajpat Rai

c) Bipin Chandra Pal

d) Balgangadhar Tilak

Solution: The statement "Swaraj is my birthright and I shall have it" was famously uttered by **d) Balgangadhar Tilak**. He was a prominent leader of the Indian independence movement and a strong advocate for self-rule.

53. Consider the following statements regarding Lucknow Pact of 1916-

i. It was an agreement between Pandit Jawaharlal Nehru and Muhammad Ali Jinnah at a joint session of both the parties held in Lucknow.

ii. It states that any legislature would not work if more than 3/4 members of any religion were against such resolution

iii. It was seen as a beacon of hope to Hindu- Muslim unity

Which of the following statements is/are correct?

a) i only

b) i and ii only

c) ii and iii only

d) All the above

Solution: The statements about the Lucknow Pact of 1916 are as follows:

i. **It was an agreement between Pandit Jawaharlal Nehru and Muhammad Ali Jinnah at a joint session of both the parties held in Lucknow.** This statement is **incorrect**. The Lucknow Pact was an agreement reached between the Indian National Congress and the Muslim League at a joint session of both the parties held in Lucknow in December 1916. Bal Gangadhar Tilak represented the Congress while framing the deal, and Muhammad Ali Jinnah (who joined the Muslim League in 1913) participated in this event.

ii. **It states that any legislature would not work if more than 3/4 members of any religion were against such resolution.** This statement is **correct**. The Lucknow Pact proposed that any resolution could be blocked if more than 3/4 of the members of any religion opposed it. This established a communal veto in the legislative body and implicitly accepted the Muslim League's contention of two distinct communities in India.

iii. **It was seen as a beacon of hope to Hindu-Muslim unity.** This statement is **correct**. The Lucknow Pact was seen as a beacon of hope to Hindu-Muslim unity. It was the first time that the Hindus and Muslims had made a joint demand for political reform to the British.

So, only the second and third statements are correct. The correct answer is **c) ii and iii only**.

54. The Book 'Poverty and Un-British Rule in India', was written by

a) Netaji Subhash Chandra Bose

b) Dadabhai Naoroji

c) Pandit Jawaharlal Nehru

d) Bankim Chandra Chattopadhyay

Solution: The book 'Poverty and Un-British Rule in India' was written by **b) Dadabhai Naoroji**. He was a scholar and a prominent leader of the Indian independence movement. In his book, Naoroji discussed the drain of wealth from India during British rule.

55. Consider the statements regarding Dandi March.

i. It was a non-cooperation movement initiated by Mahatma Gandhi

ii. Consequent upon breaking the Salt law, The Indian National Congress was declared illegal by the British.

Which of the statements given above is/ are not correct?

a) i only

b) ii only

c) i and ii

d) None of the above

Solution: The statements about the Dandi March are as follows:

i. **It was a non-cooperation movement initiated by Mahatma Gandhi.** This statement is **incorrect**. The Dandi March, also known as the Salt Satyagraha, was an act of nonviolent civil disobedience in colonial India led by Mahatma Gandhi. It was not a non-cooperation movement, but rather a direct-action campaign of tax resistance and nonviolent protest against the British salt monopoly.

ii. **Consequent upon breaking the Salt law, The Indian National Congress was declared illegal by the British.** This statement is **correct**. After the Salt Law was broken by the Indian people, the Indian National Congress was indeed declared illegal by the colonial rulers.

So, only the first statement is incorrect. The correct answer is **a) i only**.

56. Consider the following statements about Netaji Subhash Chandra Bose

i. He was never a member of the Indian National Congress

ii. He was the one to select Jana Gana Mana' as the preferred national anthem

iii. He was called "The prince among patriot"

Which of the statements given above is/ are correct?

a) i only

b) i and ii only

c) ii and iii only

d) i, ii and iii

Solution: The correct answer is **c) ii and iii only**. Here's why:

i. Netaji Subhash Chandra Bose was indeed a member of the Indian National Congress. He joined the nationalist movement led by Mahatma Gandhi and the Indian National Congress in 1921. So, statement i is incorrect.

ii. Netaji Subhash Chandra Bose played a key role in selecting "Jana Gana Mana" as the preferred national anthem. So, statement ii is correct.

iii. Netaji Subhash Chandra Bose was referred to as "The prince among patriot" by Mahatma Gandhi. So, statement iii is correct.

57. As per the 2021 report published by the NITI Aayog on Sustainable Development Goals, which amongst the following Districts in Meghalaya scored the lowest

a) East Khasi Hills

b) West Khasi Hills

c) North Garo Hills

d) South Garo Hills

Solution: Based on the 2021 NITI Aayog report on Sustainable Development Goals, the district in Meghalaya that scored the lowest is **c) North Garo Hills**. This district had a score of 56.87. Please note that these scores are subject to change as new reports are published and progress is made towards achieving the Sustainable Development Goals.

58. Lorenz Curve measures

a) Inequality of income or wealth

b) Demographics

c) Unemployment

d) Relationship between Income and Unemployment

Solution: The correct answer is **a) Inequality of income or wealth**. The Lorenz Curve is a graphical representation of the distribution of income or wealth within a population. It does not measure demographics, unemployment, or the relationship between income and unemployment.

59. Demand deposits include

a) Saving account deposits and fixed deposits

b) Saving account deposits and current account deposits

c) Current account deposits and fixed deposits

d) All Types of deposits

Solution: The correct answer is **b) Saving account deposits and current account deposits**. Demand deposits are deposits made in various current accounts or DDA types. These current accounts or DDAs are accounts using which you can retrieve your deposits without seeking approval or submitting a prior notice to the bank. Common types of DDAs are Current accounts and savings accounts. These accounts are quite different from fixed deposit accounts, where funds are locked in for some time before depositors have to wait for a withdrawal.

60. In 2011-12, poverty line was defined worth as consumption per person a month for rural areas and for urban areas.

a) Rs.816 and Rs.1,000

b) Rs.1,012 and Rs.1,210

c) Rs 550 and Rs.860

d) Rs.860 and Rs.673

Solution: The correct answer is **a) Rs.816 and Rs.1,000**. In 2011-12, the poverty line was defined as a consumption worth of Rs.816 per person per month for rural areas and Rs.1,000 per person per month for urban areas.

61. Who among the following is called as the "Father of Demographic Studies"?

a) Tim Cresswell

b) Karl Marx

c) Neil Adger

d) Aryabhatt

Solution: The correct answer is **John Graunt**. He is generally considered as the father of demographics, because he was the founder of the science of demography or the statistical study of human populations. Hence **No correct Answer.**

62. In a simple economy, which of the following is not included in Circular flow of Income?

a) Good and services

b) Spending

c) Factor payments

d)Depreciation

Solution: The correct answer is **d) Depreciation**. In a simple economy, the circular flow of income typically focuses on real transactions, omitting financial activities and flows. It includes goods and services, spending, and factor payments, but does not account for depreciation. Depreciation, which refers to the decrease in value of physical assets due to wear and tear over time, is not included in the basic model of the circular flow of income.

63. Which of the following is a characteristic of a Public good?

i. non-excludability

ii. Rival Consumption

iii. Rejectable

a) i only

b) i and ii only

c) ii and iii only

d) i, ii and iii

Solution: The correct answer is **a) i only**. Here's why:

i. **Non-Excludability**: This is a characteristic of a public good. Non-excludability means that it is costly or impossible to exclude others from using a good. So, statement i is correct.

ii. **Rival Consumption**: This is not a characteristic of a public good. Public goods are non-rivalrous, meaning that more than one person can use the good without diminishing others' ability to use it. So, statement ii is incorrect.

iii. **Rejectable**: This is not a characteristic of a public good. Public goods are typically non-rejectable, meaning that individuals cannot choose not to consume them. So, statement iii is incorrect.

64. Arrange the following "Core industries" in the descending order of their weight in Index of Industrial Production (IIP)

i. Cement

ii. Steel

iii. Refinery products

iv. Coal

a) ii-i-iii-iv

b) iv-iii-ii-i

c) iii-ii-iv-i

d) i-ii-iii-iv

Solution: The correct answer is **c) iii-ii-iv-i**. Here's why:

i. **Cement**: Its weight in the Index of Industrial Production (IIP) is 5.37%.

ii. **Steel**: Its weight in the IIP is 17.92%

iii. **Refinery products**: Its weight in the IIP is 28.04%.

iv. **Coal**: Its weight in the IIP is 10.33%

So, in descending order of their weight in the IIP, it's Refinery products (iii), Steel (ii), Coal (iv), and Cement (i). **No option given**

65. Which of the following statements correctly defines the Core Inflation?

a) An inflation measures excluding volatile and transitory price changes

b) An inflation measures of short-term price changes

c) Price changes in the core sector industries

d) Inflation in the fuel and food commodities

Solution: The correct answer is **a) An inflation measure excluding volatile and transitory price changes**. Core inflation is a measure of inflation that excludes items with volatile prices, such as food and energy. It is often calculated using the consumer price index (CPI), which is a measure of prices for goods and services. The concept of core inflation was introduced by Robert J. Gordon in 1975.

66. Which of the following Organization conducts the "Periodic Labor Force Survey (PLFS)"?

a) Central Statistical Office

b) National Sample Survey Office (NSSO)

c) NITI Aayog

d) Ministry of Labor

Solution: The correct answer is **b) National Sample Survey Office (NSSO)**. The National Sample Survey Office (NSSO), which is part of the Ministry of Statistics and Programme Implementation, has been conducting the Periodic Labor Force Survey (PLFS) since 2017.

67. With reference to BOP, import of machinery and equipment is recorded under of the account. (BOP- Balance of Payment)

a) Credit side, capital

b) Debit side, capital

c) Debit side, current

d) Credit side, current

Solution: The correct answer is **c) Debit side, current**. The import of machinery and equipment is recorded under the debit side of the current account in the Balance of Payments (BOP).

68. Net National Product at Market Price is

a) Gross National Product at Market price - Depreciation

b) Gross National Product at Market price - Net Income from Abroad

c) Gross National Product at Market price - Transfer Payment

d) Gross National Product at Market price – Subsidies

Solution: The correct answer is **a) Gross National Product at Market price - Depreciation**. Net National Product (NNP) at Market Price is the market value of the output of final goods and services produced by normal residents of an economy in its domestic territory during an accounting year. It is calculated by subtracting depreciation from the Gross National Product (GNP) at market price.

69. In June 2021, a firm was providing 5000 kg of sugar at a market price of Rs.30 per kg. But in June 2022, the supply of sugar decreased to 4500 kg at a market price of Rs.20 per kg. This change shows that the supply of sugar is

a) More elastic

b) Less elastic

c) Perfectly inelastic

d) Perfectly elastic

Solution: The correct answer is **b) Less elastic**. Here's why:

Elasticity of supply is a measure of the responsiveness of quantity supplied to a change in price. It is calculated as the percentage change in quantity supplied divided by the percentage change in price.

In this case, the price of sugar decreased by 33.33% (from Rs.30 to Rs.20), and the quantity supplied decreased by 10% (from 5000 kg to 4500 kg). Therefore, the elasticity of supply is 10%/33.33% = 0.3.

Since the elasticity of supply is less than 1, we can say that the supply of sugar is less elastic. This means that the quantity supplied is not very responsive to changes in price.

70. Bank Money is the money which is –

a) Printed by Reserve Bank of India

b) Generated in the form of credit creation

c) Printed by the government

d) Legally earned but unaccounted money

Solution: The correct answer is **b) Generated in the form of credit creation**. Bank money is a medium of exchange consisting chiefly of checks and drafts. It is money held in the form of demand deposits with commercial banks. Bank money is not printed by the Reserve Bank of India or the government, and it is not unaccounted money. It is created when banks provide loans to their customers, and these loans are then deposited back into the banking system.

71. MICR code printed in a Bank Cheque represents

a) A 9-digit Magnetic Iron Character Recognition

b) A 9-digit Magnetic Ink Character Recognition

c) A 11-digit Magnetic Indian Character Recognition

d) A 11-digit Magnetic Ink Character Recognition

Solution: The correct answer is **b) A 9-digit Magnetic Ink Character Recognition**. The MICR code is a 9-digit code that is printed at the bottom of a cheque. It is unique to each bank branch; Thus, it can be used to uniquely identify any bank branch. The first three digits represent the city (City Code).

72. What is the process called when the total revenue of Government without borrowing is less than the total expenditure?

a) Fiscal Deficit

b) Monetary Deficit

c) Deficit Financing

d) Budget Shortfall

Solution: The correct answer is **a) Fiscal Deficit**. Fiscal deficit is defined as the excess of total expenditure over total receipts excluding borrowings during a fiscal year. It represents the total borrowings needed by the government. While calculating the total revenue, borrowings are not included. This means that when the total revenue of the government without borrowing is less than the total expenditure, it results in a fiscal deficit.

73. A "Closed Economy" is an economy in which

a) The money supply is fully controlled

b) Deficit Financing takes place

c) Only exports take place

d) Neither export not imports take place

Solution: The correct answer is **d) Neither exports nor imports take place**. A closed economy is an economy that does not trade or exchange goods and services with other countries. It aims to be self-sufficient and consumes only what it produces within its own borders. A closed economy is a simplified model that ignores the effects of international trade on income and expenditure.

74. When RBI decreases the cash reserve ratio (CRR), it will

a) Decrease money supply in the economy

b) Increase money supply in the economy

c) Increase supply initially but decrease automatically later on

d) No impact on money supply in the economy

Solution: The correct answer is **b) Increase money supply in the economy**. When the Reserve Bank of India (RBI) decreases the Cash Reserve Ratio (CRR), it increases the amount of money that banks have available to lend. This leads to an expansion in the money supply Conversely, increasing the CRR reduces the funds available with commercial banks for lending, leading to a contraction in the money supply.

75. Foreign Exchange Management Act was introduced in which of the following year?

a)1998

b) 1989

c) 1999

d) 2000

Solution: The correct answer is **c) 1999**. The Foreign Exchange Management Act (FEMA) was enacted on 29 December 1999 and came into force on 1st June, 2000.

76. Which among the following is not a pillar of the BASEL-II Accord-

a) Minimum Capital

b) Supervisory review process

c) Market Discipline

d) Exchange Control

Solution: The correct answer is **d) Exchange Control**. The Basel II Accord operates under three pillars123:

1. Minimum Capital Requirements
2. Supervisory Review Process
3. Market Discipline

Exchange Control is not a pillar of the Basel II Accord.

77. Which of the following features of the Constitution have been borrowed from the Government of India Act of 1935?

i. Office of Governor

ii. Concurrent List

iii. Public Service Commission

iv. Fundamental duties

Choose the correct option-

a) i only

b) i and iii only

c) i, iii and iv only

d) i, ii, iii and iv

Solution: The correct answer is **b) i and iii only**. Here's why:

i. **Office of Governor**: This feature was borrowed from the Government of India Act of 1935.

ii. **Concurrent List**: The concept of a Concurrent List, which contained 36 items, was introduced in the Government of India Act of 1935.

iii. **Public Service Commission**: The Government of India Act of 1935 provided for the establishment of the Public Service Commission.

iv. **Fundamental Duties**: The concept of Fundamental Duties is not mentioned in the Government of India Act of 1935. It was added to the Indian Constitution by the 42nd Amendment in 1976.

78.According to which of the following Schedules to the Constitution provides for allocation of seats to the states and union territories in Rajya Sabha?

a) Sixth

b) Second

c) Seventh

d) Fourth

Solution: The correct answer is **d) Fourth**. The Fourth Schedule of the Constitution provides for the allocation of seats to the States and Union Territories in Rajya Sabha.

79. As per the 44 Amendment of the Constitution, which of the following cannot be suspended during a National Emergency?

i. Article 15

iii. Article 20

ii. Article 19

iv. Article 21

Choose the correct option

a) i only

b) i and ii only

c) ii and iii only

d) iii and iv only

Solution: The correct answer is **d) iii and iv only**. Here's why:

i. **Article 15**: This article can be suspended during a National Emergency.

ii. **Article 19**: The 44th Amendment to the Constitution, enacted in 1978, stipulates that all of Article 19's six Fundamental Rights can be suspended only when a National Emergency is declared for reasons of war or external aggression, not armed rebellion.

iii. **Article 20**: This article cannot be suspended during a National Emergency.

iv. **Article 21**: This article cannot be suspended during a National Emergency

80. Consider the following statements about the Attorney General of India.

i. To be appointed, He should have completed 5 years in High Court of any Indian state

ii. He is a part of the both Union Legislative and Union Executive

iii. He can participate and vote in the proceedings of the Indian Parliament. Which of the following statements is/are correct?

a) i only

b) i and ii only

c) i and iii only

d) i, ii and iii

Solution: The correct answer is **b) i and ii only**. Here's why:

i. **To be appointed, He should have completed 5 years in High Court of any Indian state**: This statement is correct. The Attorney General of India is appointed by the President of India and must be a person qualified to be appointed as a Judge of the Supreme Court. Hence, the attorney general must have been a judge of a high court for five years or an advocate of a high court for ten years, or an eminent jurist in the opinion of the President

ii. **He is a part of the both Union Legislative and Union Executive**: This statement is correct. The Attorney General of India is a part of the Union Executive4. He also has the right to speak and to take part in the proceedings of both the Houses of Parliament or their joint sitting and any committee of the Parliament of which he may be named a member

iii. **He can participate and vote in the proceedings of the Indian Parliament**: This statement is incorrect. While the Attorney General of India has the right to speak and to take part in the proceedings of both the Houses of Parliament or their joint sitting and any committee of the Parliament of which he may be named a member, he does not have the right to vote

81. A resolution to remove the President of India can be done after the impeachment resolution is passed by a majority of

a) One fourth of the total members of the House

b) One third of the total members of the House

c) Two by third of the total members of the House

d) One fifth of the total members of the House

Solution: The correct answer is **c) Two by third of the total members of the House**. According to Article 61 of the Constitution, a resolution to remove the President of India can be passed after the impeachment resolution is passed by a majority of two-thirds of the total members of the House.

82. What is the difference between a "Vote- on-account" and "Interim Budget"?

i. The provision of a "Vote-on-account" is used by a regular government, while an "Interim Budget" is a provision used by a caretaker government

ii. A "Vote-on-account" only deals with the expenditure in government budget, while an "In-terim Budget" includes both expenditure and receipts.

Which of the statements given above is / are correct?

a) i only

b) Both i and ii

c) ii only

d) Neither i nor ii

Solution: The correct answer is **b) Both i and ii**. Here's why:

i. **The provision of a "Vote-on-account" is used by a regular government, while an "Interim Budget" is a provision used by a caretaker government**: This statement is correct. A vote-on-account is passed every year and is used by both the regular and caretaker government, while an interim budget is a provision used by a caretaker government.

ii. **A "Vote-on-account" only deals with the expenditure in government budget, while an "Interim Budget" includes both expenditure and receipts**: This statement is correct. A vote-on-account contains just the government's expenses, whereas the interim Budget deals with receipts and payments.

83. Under which Article the High Court can issue Writs?

a) Article 131

b) Article 32

c) Article 143

d) Article 226

Solution: The correct answer is **d) Article 226**. The power to issue Writs is provided to the High Courts of India under Article 226 of the Constitution

84. Recognition of Official Languages in India is mention in which of the following Schedules of the Indian Constitution?

a) Seventh Schedule

b) Ninth Schedule

c) Eighth Schedule

d) Fifth Schedule

Solution: The correct answer is **c) Eighth Schedule**. The Eighth Schedule of the Indian Constitution lists the official languages of India. There are 22 official languages recognized in the Eighth Schedule

85. Which one of the following is punishable as sedition?

i. Bitter Criticism of the government to overthrow it.

ii. Inducing people to cease to obey the law and lawful authority.

iii. A publicist attack on the policies of the government. iv. An attempt to remove the ministers from power.

Which of the following statements is/are correct?

a) i only

b) ii only

c) i and ii only

d) i and 4 only

Solution: The correct answer is **c) i and ii only**. Here's why:

i. **Bitter Criticism of the government to overthrow it**: This statement is correct. Sedition, as defined under Section 124A of the Indian Penal Code, includes any words, either spoken or written, or by signs, or by visible representation, or otherwise, that brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards the Government established by law in India

ii. **Inducing people to cease to obey the law and lawful authority**: This statement is correct. Sedition can include actions that incite people to disobey the law and lawful authority

iii. **A publicist attack on the policies of the government**: This statement is incorrect. Criticizing the government's policies does not constitute sedition unless it incites people to disobey the law and lawful authority

iv. **An attempt to remove the ministers from power**: This statement is incorrect. Attempting to remove ministers from power through lawful means does not constitute sedition

86. Which of the following were added to the preamble through the 42 Amendment Act, 1976?

i. Socialist

ii. Secular

iii. Integrity

iv. Equality

Choose the correct option-

a) i and ii only

b) ii and iii only

c) i, ii and iii only

d) i, iii and iv

Solution: The 42nd Amendment Act, 1976 added three new words to the Preamble of the Constitution of India: Socialist, Secular, and Integrity. Therefore, the correct option is **c) i, ii and iii only**. The term Equality was not added by the 42nd Amendment Act, 1976. It was already a part of the Preamble since the inception of the Constitution.

87. The Minimum Needs Programme (MNP) was introduced in which FYP?

a) Fourth Five Year Plan

b) Fifth Five Year Plan

c) Sixth Five Year Plan

d) Seventh Five Year Plan

Solution: The Minimum Needs Programme (MNP) was introduced in the **Fifth Five Year Plan**. So, the correct option is **b) Fifth Five Year Plan**.

88. Which of the following States have a bicameral legislature?

i. Andhra Pradesh

ii. Bihar

iii. Karnataka

iv. Maharashtra

Choose the correct option-

a) i and ii only

b) is and iii only

c) i, ii and iii only

d) i, ii, ill and iv

Solution: The states of Andhra Pradesh, Bihar, Karnataka, and Maharashtra all have a bicameral legislature. Therefore, the correct option is **d) i, ii, iii, and iv**.

89. Which Commission was appointed by the Government of India to reform the Indian education sector and formed on 14 July 1964?

a) Kothari Commission

by Sarkaria Commission

c) Balwant Commission

d) Mandal Commission

Solution: The **Kothari Commission** was an ad hoc commission set up by the Government of India to examine all aspects of the educational sector in India, to develop a general pattern of education, and to recommend guidelines and policies for the development of education in India. It was formed on 14 July 1964. So, the correct option is **a) Kothari Commission**.

90. Where was the first G20 summit held and in which year?

a) Canada 2002

b) Britain 2008

c) United States of America 2008

d) France 2002

Solution: The first G20 summit was held in **Washington DC, United States of America** in the year **2008**. So, the correct option is **c) United States of America 2008**.

91. Samanvay 2022 is a Humanitarian Assistance and Disaster relief (HADR) Exercise organized by which armed forces?

i. Indian Army

ii. Indian Navy

iii. Indian Air force

iv. Indian Course guard Show

Solution: Samanvay 2022, the Annual Joint Humanitarian Assistance and Disaster Relief (HADR) Exercise, was organized by the **Indian Air Force**. So, the correct option is **iii. Indian Air force**.

92. CITES COP19 has recently accepted the proposal to downgrade the status of which animal?

a) Himalayan Yak

b) Southern white rhinos

c) Indian Soft Turtle

d) Great Indian Show

Solution: The CITES COP19 has recently accepted the proposal to downgrade the status of the **Southern white rhinos** from Appendix I to Appendix II. So, the correct option is **b) Southern white rhinos**.

93. With respect to the Transboundary Protected Areas, which of the following TPA is between India and Nepal?

1. Kanchenjunga Conservation Area

ii. Sacred Himalayan Landscape

iii. Transboundary Manas Conservation Area

Choose the correct answer using the codes given below:

a) i only

b) i & ii only

c) ii & iii only

d) i, ii & iii only

Solution: India has the following Transboundary Protected Areas (TPAs) with Nepal:

Kanchenjunga Conservation Area: It is located in the northeast corner of Nepal near the border with India and Tibet

Sacred Himalayan Landscape: Its 74% area falls in Nepal, 25% falls in Sikkim

Transboundary Manas Conservation Area is a transboundary landscape across Eastern Himalayas, connecting Bhutan and Northeastern states of Assam and Arunachal Pradesh. This is not between India and Nepal, but between India and Bhutan.

Therefore, the correct option is **b) i & ii only**.

94. Which of the following is/are degenerative nerve diseases?

i. Amyotrophic lateral sclerosis

ii. Parkinson's disease

iii. Alzheimer's disease

Choose the correct answer using the codes given below:

a) i only

b) i & ii only

d) All of the above

c) ii and iii only

Solution: All of the diseases listed, i.e., Amyotrophic lateral sclerosis, Parkinson's disease, and Alzheimer's disease, are degenerative nerve diseases. Therefore, the correct option is **d) All of the above**.

95. With reference to COVID-19, which of the following strains of viruses are the most contagious and life threatening?

a) Alpha

b) Beta

c) Gamma

d) Delta

Solution: The **Omicron** variant and its subvariants have been the predominant SARS-CoV-2 strains in the U.S. for almost two years now. The Omicron variant was more transmissible than the Delta variant. In 2023, a new Omicron strain called **EG.5 (nicknamed "Eris")** became the dominant strain in the U.S., and experts are monitoring another new strain called **BA.2.86 (nicknamed "Pirola")**. The **EG.5** strain

has been spreading faster than any other currently circulating strain. Another variant, **BA.5**, is considered the most transmittable COVID variant to date, with a greater ability than prior strains to evade prior immunity from COVID infection and vaccination.

However, the options provided in your question do not include these recent and highly transmissible variants. Among the options provided, the **Delta** variant was highly contagious and caused significant illness and death worldwide4. Therefore, from the given options, the correct answer would be **d) Delta**. But it's important to note that the situation is dynamic, and newer variants like Omicron and its subvariants (EG.5 and BA.2.86) have since emerged and are currently more prevalent.

96. Which of the following states of India shares border with Nepal?

i. Uttarakhand

ii. Arunachal Pradesh

iii. Sikkim

iv. Bihar.

Choose the following

a) i, ii and iii only

b) ii, iii and iv only

c) i, iii, iv only

d) i, ii, iii and iv

Solution: The Indian states that share a border with Nepal are Uttarakhand, Bihar, and Sikkim. Arunachal Pradesh does not share a border with Nepal. Therefore, the correct option is **c) i, iii, iv only**.

97. Which of the following Popular Sports were not featured during the 2022 Common Wealth Games?

i. Para power lifting

ii. Shooting

ii. Archery

iv. Lawn Tennis

Choose the correct option-

a) i, ii and iii only

b) i, ii and iv only

c) ii, iii and iv only

d) All of the above

Solution: The sports that were not featured during the 2022 Commonwealth Games among the options provided are **Shooting**, **Archery**, and **Lawn Tennis**. Therefore, the correct option is **c) ii, iii and iv only**.

98. Xenophobia is associated with which of the following:

a) Fear of Crowds.

b) Fear of Strangers

c) Fear of flying

d) Fear of heights

Solution: Xenophobia is associated with the **fear of strangers** It is a broad term that may be applied to any fear of someone different from an individual. Therefore, the correct option is **b) Fear of Strangers**.

99. The book "Adventures of Sherlock Holmes" was written by which of the following authors.

a) Arthur Conan Doyle

b) Sir Walter Scott

c) Jules Verne

d) Lewis Carrol

Solution: The book "Adventures of Sherlock Holmes" was written by **Arthur Conan Doyle**. Therefore, the correct option is **a) Arthur Conan Doyle**.

100. Arrange the following Elements as per the Density from highest to lowest.

i. Hydrogen

ii. Oxygen

iii. Carbon

iv. Nitrogen

Choose the correct option-

a) i, ii, iv, iii

b) ii, iv, i, iii

c) iii, iv, i, ii

d) iii, iv, ii, i

Solution: The densities of the elements are as follows:

1. Hydrogen: 0.0899 g/cm³
2. Oxygen: 1.429 g/cm³
3. Carbon: 2.26 g/cm³
4. Nitrogen: 1.251 kg/m³ or 1.251 g/cm³

Therefore, the correct arrangement from highest to lowest density is **iii. Carbon, ii. Oxygen, iv. Nitrogen, i. Hydrogen**. So, **No correct option.**