GIVE REASONS - GEOGRAPHY

**Disclaimer*: The answer may or may not contain proper keywords. To score full marks for an answer, use proper keywords recognized by the CISCE Board, updated 2025 Version.*

Climate of India

1) Goa receives heavier rainfall than Puducherry
2) Mawsynram receives the highest average annual rainfall.
3) Mangaluru is cooler than Dehli in summer.
4) Thar is a desert.
5) Kochi is warmer than Mumbai even though both lie on the western coast of India.
6) The Ganga plain gets the monsoon rain much later than the west coast of India.
7) Kanpur has extreme climate conditions.
8) Even in summer Shimla is cooler.
9) Punjab receives rainfall in winter season.
10) Some parts of India receive rainfall even in winter.
11) Hill stations in South never experience snowfall in winter.

Soils of India

1) Red soil is not suitable for agriculture.
2) Red soil is ideal for tea cultivation.
3) Alluvial soil varies in texture.
4) Khadar soil is more fertile than Bhangar soil.
5) Black soil is also known as 'Black cotton soil'.
6) Laterite soil is used as a building material.
7) Black soil does not get leached.
8) Black soil is self-ploughing.
9) Both Kharif and Rabi crops can grow in alluvial soil.
10) Soil erosion is rampant in the North-eastern region.

Natural Vegetation

1) Give two reasons why is there a need to conserve forests.
2) Give two reasons to explain as to why the tropical evergreen forests are difficult to exploit for commercial purposes.
3) There is a gradual decrease in the forest cover in India recent times.
4) The trees in the tropical desert forest have stunted growth.
5) Give three appropriate reasons for rapid depletion of forest resources in India in the past.

6) Give two reasons why monsoon deciduous forests are commercially more valuable than other types of forests.
7) Thar desert looks like a wasteland or desert soil is almost dry.
8) Coniferous are conical in shape and have needle-like leaves.
9) Xerophytic plants have long roots.
10) Forest is called 'handmaids of agriculture".
11) It is very difficult to move through tidal forests.
12) Teak wood is popularly used for ship building.
13) Plants of the littoral forests have stilted roots.
14) Trees of the tropical evergreen forests do not look bare at any time of the year.

Water Resources

1) There is an urgent need for water irrigation in India.
2) Most of south Indian states are not suitable for development of canal irrigation.
3) 'There is plenty of rainfall in India during rainy season, yet we need irrigation. Give two reasons to support your answer.
4) "The modern means of irrigation are gaining popularity". Give reasons to justify the above statement.
5) Tank irrigation is more prevalent in the peninsular part of India.
6) Although expensive, yet, sprinkler irrigation is gaining popularity in recent times.

7) The drip method of irrigation is the best among all modern methods of irrigation.
8) Canal irrigation leads to ground around it unproductive.
9) Perennial canals being a popular form of irrigation in the named states.
10) Inundation canals are being to perennial canals. Give reasons.
11) Give reasons why water scarcity occurs in India.
12) Give reasons for the conservation of water resources.
13) Well, irrigation is dominant in the northern plains of India
14) Not all farmers can afford tube well irrigation.

Minerals and Energy Resources

1) Why is Bauxite preferred in the manufacturing of aircraft?
2) Why is coal referred to as a fossil fuel?
3) Why is petroleum called "black gold"?
4) Why is the extraction of minerals like coal and iron harmful to the environment?
5) Why is iron ore called the backbone of our modern industry?
6) Why is anthracite considered to be the best quality of coal?
7) Odisha has benefitted greatly from the Hirakud project.
8) India’s location is advantageous for the generation of solar power. Why?
9) Why are Oil refineries located close to oil fields or near ports.
10) Cooper is in high demand in the electrical industry
11) Manganese is an important raw material in the steel industry.

12) The rivers of Northern Plains are extremely suited for hydel power station.
13) Dependence on fossil fuels should be reduced.

Transport

1) Why has travelling by sea decreased?
2) Why are South Indian rivers not ideal for inland water transport?
3) Why are *roadways* considered more important than any other means of transport?
4) Transport is indispensable in the northeast region of India.
5) Helicopter services are crucial during emergencies.
6) At present times, airports are being established even in smaller towns of India.
7) Coal and iron ore are best transported by rail.
8) Rail network is not well developed in the northern mountainous states of India.
9) The Northern Rivers are more suitable for navigation than the Deccan Rivers.

Answers

Climate of India

1. **Goa receives heavier rainfall than Puducherry**
   Goa receives more rainfall than Puducherry due to its location on the western coast of India, which is directly exposed to the southwest monsoon winds. The Western Ghats further enhance the orographic effect, leading to significantly higher precipitation in Goa. Puducherry, situated on the southeastern coast, is less affected by these moisture-laden winds, resulting in comparatively lower rainfall.
2. **Mawsynram receives the highest average annual rainfall**
   Mawsynram, in Meghalaya, is known for receiving the highest average annual rainfall globally due to its location on the windward side of the Khasi Hills. The southwest monsoon winds, laden with moisture from the Bay of Bengal, are forced to rise over these hills, leading to intense and sustained rainfall throughout the year.
3. **Mangaluru is cooler than Delhi in summer**
   Mangaluru, located on the southwestern coast of India, benefits from the moderating effect of the Arabian Sea, which keeps temperatures lower during the summer. In contrast, Delhi experiences extreme temperatures due to

its inland location, which leads to hotter and drier summer conditions compared to Mangaluru's relatively cooler climate.

4. **Thar is a desert**
   The Thar Desert, located in northwestern India, is characterized by its arid conditions, minimal vegetation, and extreme temperature variations. The region receives very little rainfall annually and has high temperatures during the day and cool temperatures at night, which are typical features of desert climates.

5. **Kochi is warmer than Mumbai even though both lie on the western coast of India**
   Kochi experiences higher temperatures than Mumbai because it is located closer to the equator. The tropical climate of Kochi leads to warmer and more humid conditions throughout the year, whereas Mumbai, though also coastal, is situated further north and experiences relatively cooler temperatures due to its different geographical positioning.

6. **The Ganga plain gets the monsoon rain much later than the west coast of India**
   The Ganga plain receives monsoon rains later than the west coast due to the varying paths of the monsoon winds. The western coast, being directly in the path of the southwest monsoon, experiences rainfall earlier, while the Ganga plain, located further inland, is reached by the monsoon winds after they have traversed the coastal regions.

7. **Kanpur has extreme climate conditions**
   Kanpur, located in the northern plains of India, experiences extreme climate conditions with very hot summers and cold winters. The lack of nearby geographical features to moderate temperatures contributes to the stark contrast between summer and winter temperatures in Kanpur.
8. **Even in summer Shimla is cooler**
   Shimla, situated in the northern hills, remains cooler even during summer due to its high altitude. The elevation reduces the intensity of heat, providing a more temperate climate compared to the lowland regions of India, which experience much hotter summer temperatures.
9. **Punjab receives rainfall in winter season**
   Punjab receives significant rainfall during the winter months due to the western disturbances, which bring moisture-laden winds from the Mediterranean region. This is in contrast to the monsoon rains that primarily occur during the summer.
10. **Some parts of India receive rainfall even in winter**
    In addition to the summer monsoon, some regions of India, such as parts of the western Himalayas and the northeastern states, receive rainfall during the winter due to western disturbances. These disturbances bring moisture from western regions, resulting in winter precipitation.
11. **Hill stations in South never experience snowfall in winter**

Hill stations in southern India, such as those in the Western Ghats, do not experience snowfall due to their relatively lower elevation compared to the northern Himalayas. The climate in these areas is typically cooler but does not drop to the temperatures necessary for snowfall.

Soils of India

1. **Red soil is not suitable for agriculture**
   Red soil is often not very fertile due to its low organic content and poor water-holding capacity. Its iron-rich composition, while giving it a distinct color, often results in lower agricultural productivity compared to more fertile soil types.
2. **Red soil is ideal for tea cultivation**
   Red soil, with its well-drained nature and good aeration, can be suitable for tea cultivation in certain conditions. Its ability to retain moisture and support root development makes it appropriate for growing tea, especially in regions with adequate rainfall.
3. **Alluvial soil varies in texture**
   Alluvial soil varies in texture due to its formation from the deposition of sediments by rivers. This variation can range from sandy loam to clayey loam, providing a diverse range of textures that support various types of agriculture.
4. **Khadar soil is more fertile than Bhangar soil**
   Khadar soil, found in floodplains and river valleys, is more

fertile due to frequent deposition of fresh alluvium and nutrients by seasonal floods. In contrast, Bhangar soil, which is older and located away from floodplains, often has lower fertility due to its reduced nutrient content.

5. **Black soil is also known as ‘Black cotton soil’**
   Black soil, also referred to as 'Black cotton soil,' is known for its high clay content and moisture-retentive properties. This type of soil is particularly well-suited for cotton cultivation due to its ability to support crops with its fertile and well-draining characteristics.
6. **Laterite soil is used as a building material**
   Laterite soil is used as a building material due to its hardening properties when exposed to air. This soil, rich in iron and aluminum oxides, becomes compact and durable, making it suitable for use in construction and building purposes.
7. **Black soil does not get leached**
   Black soil, with its high clay content, is less prone to leaching compared to other soil types. The clay particles retain nutrients and moisture effectively, reducing the loss of essential elements through leaching.
8. **Black soil is self-ploughing**
   Black soil has a unique property of self-ploughing due to its swelling and shrinking behavior when wet and dry. This characteristic helps in breaking up the soil structure naturally, facilitating easier cultivation and soil management.

9. **Both Kharif and Rabi crops can grow in alluvial soil**
   Alluvial soil, with its rich nutrient content and good water-holding capacity, supports the growth of both Kharif and Rabi crops. The soil's fertility and ability to retain moisture make it suitable for a variety of crops throughout different seasons.
10. **Soil erosion is rampant in the North-eastern region**
    Soil erosion is prevalent in the North-eastern region of India due to the region's steep slopes and heavy rainfall. The combination of intense rainfall and hilly terrain contributes to significant soil loss and erosion.

Natural Vegetation

1. **Give two reasons why there is a need to conserve forests**
   Forests play a crucial role in maintaining biodiversity and providing habitat for wildlife, which is essential for ecological balance. Additionally, they help in regulating climate, controlling soil erosion, and maintaining the water cycle, which are vital for sustaining human life and natural ecosystems.
2. **Give two reasons to explain why the tropical evergreen forests are difficult to exploit for commercial purposes**
   Tropical evergreen forests have dense canopies and a high diversity of plant species, making access and extraction challenging. The high humidity and heavy rainfall also lead to rapid growth and regrowth,

complicating logging operations and making sustainable exploitation difficult.

3. **There is a gradual decrease in the forest cover in India in recent times**
   Forest cover in India has been decreasing due to deforestation driven by urbanization, agricultural expansion, and industrial activities. Additionally, illegal logging and land conversion for development further contribute to the loss of forested areas.
4. **The trees in the tropical desert forest have stunted growth**
   In tropical desert forests, trees exhibit stunted growth due to extreme aridity, low soil fertility, and high temperatures. These harsh conditions limit the availability of water and nutrients, resulting in shorter and less vigorous vegetation.
5. **Give three appropriate reasons for the rapid depletion of forest resources in India in the past**
   Forest resources in India have been rapidly depleted due to large-scale deforestation for agricultural expansion, logging for commercial purposes, and urbanization. Additionally, illegal timber trade and the conversion of forest land for infrastructure development have further accelerated deforestation.
6. **Give two reasons why monsoon deciduous forests are commercially more valuable than other types of forests**
   Monsoon deciduous forests are commercially valuable

because they provide a variety of hardwood species that are suitable for timber and paper production. These forests also experience a predictable seasonal cycle, making it easier to manage and harvest resources sustainably.

7. **Thar desert looks like a wasteland or desert soil is almost dry**
   The Thar Desert appears as a wasteland due to its extremely dry conditions and sparse vegetation. The lack of sufficient rainfall and high evaporation rates result in arid soil that is often devoid of moisture and plant life.

8. **Coniferous trees are conical in shape and have needle-like leaves**
   Coniferous trees, such as pines and firs, are conical in shape and have needle-like leaves to minimize water loss and withstand harsh winter conditions. Their shape helps in shedding snow and reduces wind resistance, making them well-adapted to cold climates.

9. **Xerophytic plants have long roots**
   Xerophytic plants, which are adapted to arid environments, have long roots to access deep water sources and survive prolonged dry periods. These adaptations enable them to efficiently utilize limited water resources in their harsh habitats.

10. **Forest is called ‘handmaids of agriculture’**
    Forests are termed ‘handmaids of agriculture’ because they play a supportive role in agriculture by preventing soil erosion, improving soil fertility through nutrient recycling,

and maintaining the water cycle. Their presence ensures sustainable agricultural practices and enhances crop productivity.

11. **It is very difficult to move through tidal forests**
    Tidal forests, also known as mangrove forests, are difficult to navigate due to their dense and tangled vegetation, muddy terrain, and fluctuating water levels. The combination of these factors makes travel and access challenging in these unique ecosystems.

12. **Teak wood is popularly used for shipbuilding**
    Teak wood is favored for shipbuilding due to its durability, resistance to water and insects, and strength. Its natural oils and tight grain make it ideal for constructing ships and boats that need to withstand harsh maritime conditions.

13. **Plants of the littoral forests have stilted roots**
    Littoral forests, located along coastlines and estuaries, feature plants with stilted roots that provide stability and support in the waterlogged and unstable soil conditions. These roots help the plants anchor securely and access oxygen in their submerged environments.

14. **Trees of the tropical evergreen forests do not look bare at any time of the year**
    Tropical evergreen forests maintain their lush, green appearance year-round due to the consistent warm and humid climate. The continuous growth and replacement of leaves ensure that the trees remain covered and do not experience seasonal leaf loss.

Water Resources

1. **There is an urgent need for water irrigation in India**
   India faces an urgent need for water irrigation due to its dependence on monsoon rains, which are often irregular and insufficient for year-round agriculture. Irrigation helps to ensure consistent crop yields and reduces dependence on unpredictable rainfall patterns.
2. **Most of South Indian states are not suitable for development of canal irrigation**
   South Indian states often have rocky and uneven terrain, which makes the construction and maintenance of canal irrigation systems challenging. Additionally, the region's limited river systems and relatively low water availability further complicate canal irrigation development.
3. **‘There is plenty of rainfall in India during the rainy season, yet we need irrigation. Give two reasons to support your answer**
   Despite abundant rainfall during the monsoon, its irregular distribution and variability often lead to water shortages in different regions. Additionally, many areas experience high evaporation rates or lack adequate storage facilities to capture and retain rainwater for agricultural use throughout the year.
4. **“The modern means of irrigation are gaining popularity”. Give reasons to justify the above statement**
   Modern irrigation methods, such as drip and sprinkler systems, are gaining popularity due to their efficiency in

water use and ability to provide precise water application. These methods help conserve water, reduce wastage, and enhance crop yields, making them increasingly preferred in contemporary agriculture.

5. **Tank irrigation is more prevalent in the peninsular part of India**
   Tank irrigation is more common in the peninsular part of India due to the region's uneven rainfall distribution and the need to store water for dry periods. Tanks, or small reservoirs, are used to capture and store runoff from monsoon rains, providing a crucial water source for irrigation during dry spells.
6. **Although expensive, yet, sprinkler irrigation is gaining popularity in recent times**
   Sprinkler irrigation, despite its high initial cost, is gaining popularity due to its efficiency in distributing water over large areas and reducing water wastage. Its ability to reach crops in uneven terrain and its effectiveness in areas with limited water resources contribute to its increasing adoption.
7. **The drip method of irrigation is the best among all modern methods of irrigation**
   Drip irrigation is considered the best modern method due to its precise water delivery directly to the plant roots, which minimizes evaporation and runoff. This method conserves water, improves crop yield, and is highly efficient for various types of crops, especially in water-scarce regions.

8. **Canal irrigation leads to ground around it unproductive**
   Canal irrigation can lead to the surrounding land becoming unproductive due to waterlogging and salinization. Over time, excessive water from canals can raise the water table, leading to soil degradation and reduced agricultural productivity.
9. **Perennial canals being a popular form of irrigation in the named states**
   Perennial canals, which provide a continuous water supply throughout the year, are popular in regions with reliable water sources such as the northern plains. They ensure consistent irrigation and support multiple cropping seasons, enhancing agricultural productivity.
10. **Inundation canals are being replaced by perennial canals. Give reasons**
    Inundation canals, which depend on seasonal flooding, are being replaced by perennial canals because they provide a more reliable and consistent water supply. Perennial canals ensure year-round irrigation, reducing the dependence on unpredictable flood patterns and improving agricultural stability.
11. **Give reasons why water scarcity occurs in India**
    Water scarcity in India arises from irregular rainfall distribution, over-extraction of groundwater, and inadequate water management infrastructure. Additionally, factors such as population growth, urbanization, and pollution contribute to the increasing demand and diminishing availability of water resources.

12. **Give reasons for the conservation of water resources**

    Conserving water resources is essential to ensure a sustainable supply for future generations, support agricultural and industrial needs, and maintain ecological balance. Effective water conservation practices help prevent depletion, reduce pollution, and ensure that water remains available for various uses and ecosystems.

13. **Well irrigation is dominant in the northern plains of India**

    Well irrigation is prevalent in the northern plains of India due to the availability of abundant groundwater resources in this region. The flat terrain and high water table make it feasible and efficient to extract groundwater for irrigation purposes.

14. **Not all farmers can afford tube well irrigation**

    Tube well irrigation requires significant investment in infrastructure and maintenance, making it inaccessible to many small and marginal farmers. The high costs associated with drilling, installing, and operating tube wells can be a barrier for farmers with limited financial resources.

Minerals and Energy Resources

1. **Why is Bauxite preferred in the manufacturing of aircraft?**

    Bauxite is preferred for aircraft manufacturing because it is the primary source of aluminum, which is lightweight, strong, and resistant to corrosion. These properties are

crucial for the construction of aircraft, where weight reduction and durability are essential.

2. **Why is coal referred to as a fossil fuel?**
   Coal is referred to as a fossil fuel because it is formed from the remains of ancient plants that underwent geological processes over millions of years. Its carbon-rich composition and origin from prehistoric organic matter classify it as a fossil fuel.

3. **Why is petroleum called "black gold"?**
   Petroleum is called "black gold" due to its high economic value and critical role in modern industries and energy production. The term reflects its importance and the significant wealth it generates, akin to the value of gold.

4. **Why is the extraction of minerals like coal and iron harmful to the environment?**
   The extraction of minerals like coal and iron often leads to environmental damage such as deforestation, habitat destruction, and soil erosion. Additionally, mining operations can result in pollution of air, water, and soil, impacting ecosystems and human health.

5. **Why is iron ore called the backbone of our modern industry?**
   Iron ore is considered the backbone of modern industry because it is a primary raw material for producing steel, which is essential for construction, manufacturing, and infrastructure. The steel industry relies heavily on iron ore for its critical role in industrial development.

6. **Why is anthracite considered to be the best quality of coal?**
   Anthracite is considered the best quality of coal due to its high carbon content, which makes it burn hotter and cleaner than other types of coal. Its superior energy content and low impurities contribute to its high efficiency and value.
7. **Odisha has benefitted greatly from the Hirakud project**
   Odisha has gained significantly from the Hirakud project through improved irrigation, flood control, and hydroelectric power generation. The project has enhanced agricultural productivity, provided a reliable water source, and contributed to regional development.
8. **India's location is advantageous for the generation of solar power. Why?**
   India's location, with its high solar insolation and ample sunlight throughout the year, is highly advantageous for solar power generation. The country's geographical position allows for efficient harnessing of solar energy, making it a viable and sustainable energy source.
9. **Why are oil refineries located close to oil fields or near ports?**
   Oil refineries are located near oil fields or ports to reduce transportation costs and facilitate the efficient processing of crude oil. Proximity to oil fields ensures a steady supply of raw material, while locations near ports facilitate the import and export of petroleum products.

10. **Copper is in high demand in the electrical industry**

    Copper is in high demand in the electrical industry due to its excellent electrical conductivity, which makes it ideal for wiring and electrical components. Its efficiency in transmitting electrical currents and resistance to corrosion are crucial for electrical systems and infrastructure.

11. **Manganese is an important raw material in the steel industry**

    Manganese is crucial in the steel industry as it improves the strength, toughness, and resistance to wear and impact of steel. It is used as an alloying element to enhance the quality and durability of steel products.

12. **The rivers of Northern Plains are extremely suited for hydel power stations**

    The rivers of the Northern Plains, with their high flow rates and steep gradients, are well-suited for hydropower generation. The potential for significant energy production from these rivers makes them ideal locations for hydel power stations.

13. **Dependence on fossil fuels should be reduced**

    Reducing dependence on fossil fuels is essential to mitigate climate change, decrease air pollution, and promote sustainable energy practices. Fossil fuels contribute to greenhouse gas emissions and environmental degradation, making alternative energy

sources and conservation practices necessary for long-term sustainability.

Transport

1. **Why has travelling by sea decreased?**
   Traveling by sea has decreased due to advancements in air travel, which offers faster and more efficient transportation. Additionally, the growth of road and rail networks provides more convenient and reliable alternatives for both passenger and cargo transport.
2. **Why are South Indian rivers not ideal for inland water transport?**
   South Indian rivers are not ideal for inland water transport due to their shallow depths, seasonal fluctuations in water levels, and rocky terrains. These conditions limit the navigability of the rivers and make them less suitable for large-scale inland transportation.
3. **Why are roadways considered more important than any other means of transport?**
   Roadways are considered more important due to their flexibility, extensive coverage, and ability to connect remote and rural areas. They provide door-to-door transport services, are essential for local and regional connectivity, and support a wide range of economic activities.
4. **Transport is indispensable in the northeast region of India**
   Transport is crucial in the northeast region of India due to

its geographic isolation, diverse terrain, and limited connectivity. Efficient transport infrastructure is necessary for the movement of goods and people, supporting economic development and integration with the rest of the country.

5. **Helicopter services are crucial during emergencies**
   Helicopter services are vital during emergencies because they provide rapid and direct access to remote or inaccessible areas. They are used for medical evacuations, disaster relief, and delivering essential supplies, ensuring timely assistance in critical situations.
6. **At present times, airports are being established even in smaller towns of India**
   Airports are being established in smaller towns to enhance regional connectivity, boost local economies, and promote tourism. Improved air travel infrastructure helps in reducing travel time, supporting economic development, and integrating smaller towns with major urban centers.
7. **Coal and iron ore are best transported by rail**
   Rail transport is ideal for coal and iron ore due to its capacity to handle large volumes of bulk cargo efficiently. Railways provide a cost-effective and reliable means of transporting heavy and bulk materials over long distances, which is essential for the mining and steel industries.
8. **Rail network is not well developed in the northern mountainous states of India**

The rail network in northern mountainous states is underdeveloped due to challenging terrain, including steep gradients and difficult construction conditions. Building and maintaining rail infrastructure in these regions is costly and complex, leading to limited rail connectivity.

9. **The Northern Rivers are more suitable for navigation than the Deccan Rivers**
   The Northern Rivers are more suitable for navigation due to their larger size, deeper channels, and more consistent water flow. In contrast, the Deccan Rivers are often characterized by shallower depths and seasonal variations, making them less ideal for navigation.