CBSE EXAMINATION PAPER-2022

GEOGRAPHY

(Solved)

Time allowed : 3 hours | Maximum Marks : 37

General Instructions :

Read the following instructions carefully and follow them :

i. This question paper contains **13 questions.** All questions are **compulsory.**

ii. This question paper is divided into **3 sections.**

iii. **Section A** – questions number **1 to 2** are case based questions

iv. **Section B** – questions number **3 to 9** are short answer

v. **Section C** – questions number **10 to 13** are long answer

vi. There is no overall choice given in the question paper. However, an internal choice has been provided in few questions.

vii. Use of calculator is NOT allowed.

Section A

Question 1.

Read the following source and answer the given questions:

The process of development of tribal area of Bharmaur started in 1970s when Gaddis were included among 'scheduled tribes'. Under the Fifth Five Year Plan, the tribal sub-plan was introduced in 1974 and Bharmaur was designated as one of the five Integrated Tribal Development Projects (ITDP) in Himachal Pradesh. This area development plan was aimed at improving the quality of life of the Gaddis and narrowing the gap in the level of development between Bharmaur and other areas of Himachal Pradesh. This plan laid the highest priority on the development of transport and communications, agriculture and allied activities, and social and community services.

The most significant contribution of the tribal development sub-plan in Bharmaur region is the development of infrastructure in terms of schools, healthcare facilities, potable water, roads, communications, and electricity. But the villages located along the river Ravi in Holi and Khani areas are the main beneficiaries of infrastructural development. The remote villages in Tundah and Kugti areas still do not have sufficient infrastructure.

(1) Mention the main objective of the 'integrated tribal development project' in Bharmaur region.

[1 Marks]

Answer: Answer: The main objective of the Integrated Tribal Development Project in Bharmaur was to improve the quality of life of the Gaddis and reduce the development gap between Bharmaur and other areas of Himachal Pradesh by focusing on transport, communications, agriculture, and social services, as mentioned in the case passage.

Key Points: Improve quality of life of the Gaddis - Narrow development gap between Bharmaur and other areas - Focus on transport, communications, agriculture, and social services

(2) Explain the outcome of tribal development sub-plan in this region.

[1 Marks]

Answer: The tribal development sub-plan in Bharmaur has improved infrastructure like schools, healthcare, potable water, roads, communications and electricity especially in villages along the river Ravi in Holi and Khani. However, remote villages in Tundah and Kugti still lack sufficient infrastructure as per the case passage.

Key Points: Improved infrastructure in schools and healthcare - Development of roads, water and electricity - Benefits mainly in villages near river Ravi Holi and Khani areas

(3)

Why is it necessary to develop infrastructural facilities for integrated development of a region? Explain.

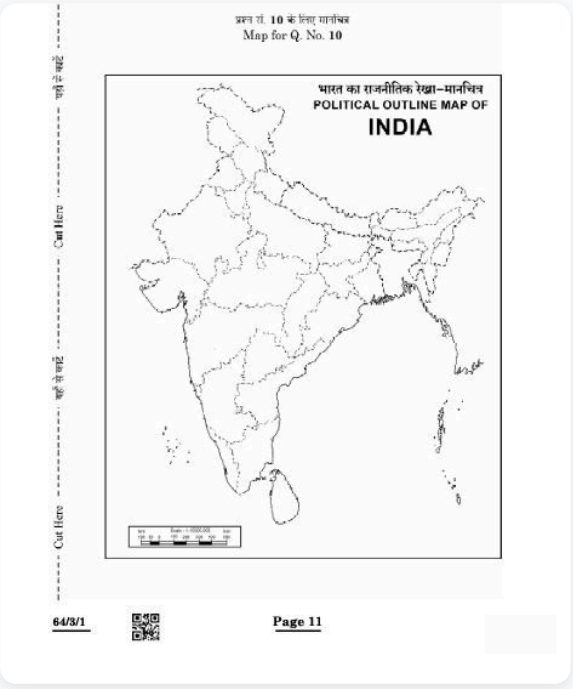
[1 Marks]

Answer: Infrastructural facilities such as roads, schools, healthcare, and electricity are necessary for integrated development as they improve the quality of life and provide basic needs to people. The case of Bharmaur shows that development of infrastructure under the tribal sub-plan helped improve living standards and reduce developmental gaps with other areas

Key Points: Infrastructure improves quality of life - Provides basic services and facilities - Reduces development gap between regions

Question 2.

On the given political outline map of India, locate and label any five from the following Geographical features with appropriate symbols :



(1)

Raniganj — Coal mines

[1 Marks]

Answer: Raniganj coal mines are located in the Damodar Valley within the Jharkhand-Bengal coal belt. According to the passage, Raniganj is one of the important Gondwana coal fields known for bituminous coal. On the map, we mark Raniganj in West Bengal and label it with the coal mine symbol as instructed.
This highlights its significance as a major coal mining centre in India.

Key Points: Raniganj is a major coal field - Located in Damodar Valley in West Bengal - Important Gondwana coal mine site

(2)

The southern-most station of North-South Corridor.

[1 Marks]

Answer: The southern-most station of the North-South Corridor is Kanniyakumari. According to the case passage, the mainland of India extends from Kashmir in the north to Kanniyakumari in the south. Therefore, Kanniyakumari marks the southern end of the North-South Corridor on the map of India.

Key Points: Kanniyakumari is southern-most station - India mainland extends to Kanniyakumari in the south - North-South Corridor runs from north to south ending at Kanniyakumari

(3)

Khetri— Copper mines

[1 Marks]

Answer: Khetri in Rajasthan is a famous copper mining area. It is one of the important sites for copper extraction in India, as mentioned in the case passage about India's rich mineral resources mainly found in peninsular India. On the map, Khetri can be marked with the symbol for copper mines to show its significance.

Key Points: Khetri is a copper mining site - Located in Rajasthan - Important for copper extraction in India

(4)

The eastern-most metropolitan city connected by golden quadrilateral.

[1 Marks]

Answer: The eastern-most metropolitan city connected by the Golden Quadrilateral is Kolkata. The Golden Quadrilateral is a network of highways connecting four major metro cities of India: Delhi, Mumbai, Chennai, and Kolkata. It helps reduce time, distance, and cost of travel between these cities, including Kolkata which lies in the eastern part of India as given in the case passage.

Key Points: Golden Quadrilateral connects four metro cities - Kolkata is easternmost metro city in GQ - Helps reduce travel time and cost

(5)

Jamnagar — Oil refineries.

[1 Marks]

Answer: Jamnagar in Gujarat is marked on the map with the symbol for oil refineries as it is a major center for oil refining. This matches the information in the case where Jamnagar is known for its oil refineries, representing the conventional energy resources of India. Marking Jamnagar correctly helps show important energy hubs in the country.

Key Points: Jamnagar location - Oil refineries symbol - Represents conventional energy resources

(6)

Balaghat — Manganese mines

[1 Marks]

Answer: Balaghat is an important region for manganese mining in Madhya Pradesh. According to the case passage, the manganese belt of Madhya Pradesh extends through Balaghat district among others. Hence, Balaghat should be marked and labeled as a manganese mine location on the map.

Key Points: Balaghat located in Madhya Pradesh - Balaghat is part of manganese belt - Manganese mines are to be marked on the map

Section B

Question 3.

"The quaternary sector along with the tertiary sector has replaced most of the primary and secondary employment." Support the statement.

[3 Marks]

Answer: The quaternary and tertiary sectors have replaced most primary and secondary employment due to the shift in economic activities.

The **quaternary sector** involves knowledge-based services like information technology, research, and management. People working as CEOs, IT professionals, and medical transcriptionists belong to this

sector. It focuses on collection, production, and distribution of information.
The **tertiary sector** includes services such as trade, transport, communication, banking, education, and health.
With economic development, many people moved away from farming and manufacturing (primary and secondary sectors) to service-oriented jobs. Over half the workers in developed economies are employed in these service sectors.
This shift is because services now have higher demand and contribute more to economic growth.
Thus, the increase in employment in quaternary and tertiary sectors and the decrease in primary and secondary sectors shows a structural change in the economy towards knowledge and services.
This supports the statement that the quaternary and tertiary sectors have replaced most primary and secondary employment.

> **Key Points: Quaternary sector is knowledge-based services - Tertiary sector includes trade, transport, communication and other services - Shift from farming and manufacturing to services due to economic growth**

Question 4. How are large scale industries different from cottage industries? Explain.

[3 Marks]

Answer: Difference between Large Scale Industries and Cottage Industries
Cottage industries are small scale industries where production is done at home using simple tools and family labour. They involve less capital investment and produce goods in small quantities. These industries use local raw materials and provide local employment.
On the other hand, large scale industries require huge capital investment and advanced technology. They use specialised skilled workers and large machinery to produce goods on a large scale. Production is done in big factories and products are meant for national and international markets.
Key Differences:
1. **Scale of Production:** Cottage industries produce small quantities whereas large scale industries produce large quantities.
2. **Capital:** Cottage industries use less capital; large scale industries need large capital.
3. **Labour:** Cottage industries use family or unskilled labour; large scale industries employ skilled and specialised workers.
4. **Technology:** Cottage industries use simple tools; large scale industries use advanced machines.
5. **Location:** Cottage industries are located in homes; large scale industries are located in factories.
This shows how large scale industries differ significantly from cottage industries in size, technology, production, and capital requirements.

> **Key Points: Scale of production-small vs large - Capital required-less vs high - Labour used-family/unskilled vs skilled/specialised - Technology-simple tools vs advanced machines - Location-home vs factory**

Question 5. How are small scale industries different from household industries? Explain.

[3 Marks]

Answer: Small scale industries and household industries vary significantly in their structure and operation. Small scale industries are established outside of the home, utilizing workshops for production. They employ semi-skilled labor and utilize simple power-driven machines, contributing to local employment and economic growth. In contrast, household industries are the smallest manufacturing units where production occurs at home using local raw materials and simple tools, often involving family members. These products may be for personal consumption or barter and have low commercial emphasis, unlike the broader market focus of small scale industries.

> **Key Points: Location of production; Use of machinery; Labor employed; Economic impact; Product focus**

Question 6.

Why is 'technological innovation' essential for industries ? Explain.

[2 Marks]

Answer: Technological innovation is essential for industries as it drives efficiency, enhances product quality, and enables the development of new products that meet evolving consumer demands. In high-tech industries, such as pharmaceuticals and electronics, extensive research and development lead to advanced manufacturing processes. Automation and mechanization reduce labor costs and waste, improving productivity. Moreover, innovation allows industries to stay competitive by adopting cutting-edge technologies, ultimately leading to sustainable growth and reduced environmental impact.

> **Key Points: Efficiency improvements-Enhanced product quality-New product development through R&D-Automation reduces labor costs and waste-Competitive advantage-Sustainable growth**

Question 7.

"Transport is an organised industry created to satisfy man's basic need of mobility." Support the statement.

[2 Marks]

Answer: Transport plays a crucial role in modern society, addressing the fundamental human need for mobility. It facilitates the movement of people and goods across various modes, including land, water, and air. By enhancing the efficiency of production, distribution, and consumption, transport significantly adds value at every stage of the supply chain. The existence of a structured transport network not only supports daily life but also fosters social interaction and economic development, thereby promoting cooperation among communities.

Key Points: Transport is essential for mobility- It includes multiple modes (land, water, air)- Facilitates production, distribution, consumption- Enhances value at every supply chain stage- Supports social interaction and economic development- Organized structure promotes cooperation.

Question 8.

Mention any four features of non-metallic minerals in India.

[2 Marks]

Answer: Non-metallic minerals in India, such as mica, limestone, dolomite, and phosphate, have several distinct features. Firstly, mica is mainly used in the electrical and electronic industries due to its excellent insulating properties and ability to be split into thin sheets. Secondly, limestone, which is used in cement production, is abundant in regions like Karnataka and Andhra Pradesh. Thirdly, dolomite, another important non-metallic mineral, is utilized in the production of glass and ceramics. Lastly, phosphate rock is essential for fertilizer production, supporting agricultural activities in the country. These minerals contribute significantly to local economies through various applications.

Key Points: Mica used in electronics; Limestone crucial for cement; Dolomite used in glass; Phosphate essential for fertilizers

Question 9.

Mention any four features of ‘Geothermal energy’ in India.

[2 Marks]

Answer: Geothermal energy in India offers several significant features. First, it is a clean and renewable source of energy, which helps reduce greenhouse gas emissions and combat climate change. Second, India has identified geothermal potential in regions like Himachal Pradesh, with a plant commissioned at Manikaran, showcasing ongoing developments in the sector. Third, geothermal energy provides a stable base-load power source, as it is not dependent on weather conditions unlike solar or wind energy. Lastly, the utilization of geothermal energy taps into the natural heat from the Earth, ensuring a sustainable method for power generation, which can be enhanced via the use of hot springs and geysers present in various parts of the country.

Key Points: Clean and renewable energy source-Stable base-load power-Great potential in regions like Himachal Pradesh-Utilization of natural heat from Earth

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Section C

Question 10.

Examine any five factors that are responsible for population flow from rural to urban areas in India.

[5 Marks]

Answer: Factors Responsible for Population Flow from Rural to Urban Areas in India

Population flow from rural to urban areas in India is mainly due to certain social, economic and environmental factors. The five important factors are:

1. Search for Employment Opportunities: One of the major reasons for migration is the lack of job opportunities in rural areas. Urban areas offer better employment options in industries, services, and businesses.

2. Higher Income and Better Living Standards: People move to cities attracted by better income, improved standard of living, and availability of amenities such as healthcare, education, and recreation.

3. Educational Facilities: Urban areas have better educational institutions and facilities than rural areas. Family members, especially the younger generation, migrate to access better education.

4. Social Factors: Migration is influenced by social reasons such as joining family members, getting rid of caste restrictions, or seeking a modern lifestyle.

5. Mechanization of Agriculture: With the introduction of modern farming techniques and machines, fewer laborers are needed in rural agriculture, forcing surplus rural labor to migrate to cities in search of jobs.

Thus, these factors collectively contribute to an increasing population flow from rural to urban India, leading to rapid urbanization.

> **Key Points: Lack of job opportunities in rural areas - Higher income and better living standards in urban areas - Better educational facilities in cities - Social factors like family reunion and lifestyle - Mechanization of agriculture reducing rural employment**

Question 11.

"Pipelines are the most convenient and efficient mode of transporting liquids and gases over long distances in India." Examine the statement.

[5 Marks]

Answer: Answer:

Pipelines are indeed the most convenient and efficient way to transport liquids and gases over long distances in India for several reasons.

Firstly, pipelines provide a continuous and uninterrupted flow of materials such as water, petroleum, natural gas, and even liquidified coal. This reduces dependency on other slower modes of transport like road or rail.

Secondly, pipelines are safer and cause less pollution compared to transport by road or rail. They have fewer chances of accidents or spills and reduce the risk of theft or damage.

Thirdly, pipelines are cost-effective in the long run. Although the initial cost of laying pipelines is high,

the maintenance and operational cost is low, making it economical for transporting large quantities.
Fourthly, pipelines require less manpower and have minimal impact on the environment. They help in reducing traffic congestion by lowering the number of tankers and trucks needed.
In India, Oil India Limited (OIL) and other organisations operate extensive networks of oil and gas pipelines which help in the efficient supply of energy resources across the country.
Moreover, pipelines can even transport solids converted into slurry, increasing their utility.
To conclude, pipelines are the most suitable mode for transporting liquids and gases over long distances in India due to their efficiency, safety, cost-effectiveness, and environmental benefits.

Key Points: Continuous and uninterrupted flow - Safe and environmentally friendly - Cost-effective and efficient for large quantities

Question 12.

"Road transport is the most economical for short distances compared to railways in the world." Support the statement.

[5 Marks]

Answer: Road transport is considered the most economical mode of transport for short distances compared to railways due to several important reasons.
1. Door-to-Door Service: Road transport provides direct door-to-door delivery of passengers and goods. This reduces loading and unloading costs and time, making it more efficient for short distance travel.
2. Flexibility and Accessibility: Roads connect remote and rural areas where railways may not reach. This makes road transport more accessible and practical for shorter trips.
3. Cost-effective for Short Distances: For short distances, the cost of constructing and maintaining railway infrastructure is not practical. Roads are simpler and cheaper to build and maintain for short routes.
4. Time Efficiency: For short distances, road transport is faster as it does not require fixed schedules like trains. Vehicles can start their journey immediately without waiting.
5. Volume of Traffic: Approximately 85 percent of passengers and 70 percent of freight in many countries are transported by road annually, showing its dominance especially in short distances.
6. Suitability for Less Bulk Goods: Road transport is better for transporting smaller loads or less bulky goods over short distances.
In conclusion, while railways are ideal for long distances and heavy goods, road transport offers an economical, flexible, and time-saving solution for short distance travel and freight movement, making it the preferred choice worldwide for such purposes.

Key Points: Door-to-door service - Flexibility and access to remote areas - Cost-effective and time-efficient for short distances

Question 13. Explain the importance of waterways as a mode of transportation.

[5 Marks]

Answer: Importance of Waterways as a Mode of Transportation

Waterways have been used as a means of transport since ancient times. Inland waterways such as rivers, canals, lakes, and coastal areas are important channels for transporting cargo and passengers. One of the greatest advantages of waterways is that they do not require the construction of roads or railways, which reduces infrastructure costs. Water transport is very fuel-efficient and eco-friendly because water causes less friction than land, thus consuming less energy.

Water transport is also the cheapest mode for carrying heavy and bulky goods over long distances, making it economically beneficial. For example, India has about 14,500 km of navigable waterways, which contribute around 1% to its total transport capacity. The navigability of waterways depends on factors like channel depth and width, continuous water flow, and the technology used.

Although waterways face competition from roads and railways, their ability to carry large volumes cost-effectively remains crucial. Oceanic waterways connect countries worldwide and require only port facilities at the start and end. Thus, waterways are vital for both inland and international trade and passenger travel, providing an efficient and sustainable transport option.

Key Points: Waterways do not require route construction - Water transport is fuel-efficient and eco-friendly - Cheapest mode for heavy and bulky goods transport