CBSE EXAMINATION PAPER-2026

GEOGRAPHY

(Solved)

Time allowed : 3 hours | Maximum Marks : 77

General Instructions :

Read the following instructions carefully and follow them :

i. This question paper contains **32 questions.** All questions are **compulsory.**

ii. This question paper is divided into **4 sections.**

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

iv. **Section B** – questions number **2 to 18** are multiple choice questions

v. **Section C** – questions number **19 to 23** are short answer

vi. **Section D** – questions number **24 to 32** are long answer

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

viii. Use of calculator is NOT allowed.

Section A

Question 1.

Read the given passage carefully and answer the questions that follow :

Water Pollution

Industries produce several undesirable products including industrial wastes, polluted waste water, poisonous gases, chemical residuals, numerous heavy metals, dust, smoke, etc. Most of the industrial wastes are disposed off in running water or lakes. Consequently, poisonous elements reach the reservoirs, rivers and other water bodies, which destroy the bio-system of these waters. Major water polluting industries are leather, pulp and paper, textiles and chemicals.

(1) Explain how industries are the major contributor of water pollution in India.

[1 Marks]

Answer: Industries are a major cause of water pollution in India because they produce wastes like polluted waste water, heavy metals and chemicals which are often dumped into rivers and lakes. This poisonous waste harms aquatic life and destroys water ecosystems as explained in the passage.

Key Points: Industries produce harmful wastes - Industrial wastes are dumped in water bodies - Poisonous elements destroy aquatic life

(2) Suggest the way for minimising water pollution.

[1 Marks]

Answer:

To minimise water pollution, industries should treat their wastes before disposal to avoid releasing poisonous elements into water bodies.
Public awareness about the harmful effects of water pollution can also help in reducing pollutants.
Strict implementation of laws like the Water Cess Act can control industrial waste discharge.

Key Points: Treat industrial waste before disposal - Increase public awareness about water pollution - Implement and enforce pollution control laws

(3) Mention two rivers of India which are highly polluted.

[1 Marks]

Answer: Two highly polluted rivers of India are the Ganga and the Yamuna. These rivers receive industrial wastes and domestic sewage from nearby cities, causing severe water pollution as mentioned in the passage. The disposal of industrial and urban wastes into them destroys the aquatic ecosystem.

Key Points: Ganga - Yamuna - affected by industrial and domestic waste

Section B

Question 2.

Which of the following statements related to the concept of 'development' are correct ? Choose the appropriate option.

I. Development means positive change in life.

II. When positive growth is there, it is development.

III. When quantity is greater, it is development.

IV. Development is always relative to value.

[1 Marks]

(A) Only I, II and III are correct

(B) Only II, III and IV are correct

(C) Only I, II and IV are correct

(D) Only I, III and IV are correct

Explanation: According to the context, development means a positive qualitative change, which improves the quality of life and is always value positive. Statement I is correct because development is indeed a positive change in life. Statement II is correct because development occurs when there is positive growth, but this positive growth must lead to qualitative improvement. Statement IV is correct because development is relative to value, implying that it is not just about quantity but about the quality and value of changes. Statement III is incorrect because development is not simply about an

increase in quantity; growth may be quantitative and value neutral, while development requires a positive qualitative change.

Question 3.

Match column-I with column-II correctly and choose the appropriate option :

[1 Marks]

Column-I (Approach)		Column-II (Characteristics)	
a.	Income Approach	i.	Proposed by International Labour Organisation
b.	Welfare Approach	ii.	Health, education and access to resources – key factors
c.	Basic Needs Approach	iii.	It is one of the oldest approach
d.	Capability Approach	iv.	Human being – targeted beneficiaries

Options :

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

(A) A

(B) B

(C) D

(D) C

Explanation:

Income Approach (a-iii): This is one of the oldest approaches to human development, where development is linked to income levels.

Welfare Approach (b -iv): This approach views human beings as beneficiaries or targets of all developmental activities.

Basic Needs Approach (c- i): This was proposed by the International Labour Organisation (ILO) and emphasizes six basic needs.

Capability Approach (d -ii): Associated with Prof. Amartya Sen, focusing on building human capabilities in health, education, and resource access.

Question 4.

Which one of the following is the low latitudes zone of subsistence gathering practiced in the world ?

[1 Marks]

(A) Northern Canada

(B) Southeast Asia

(C) Southeast Chile

(D) Northern Eurasia

Explanation: According to the context, gathering is practiced in low latitude zones such as the Amazon Basin, tropical Africa, northern fringe of Australia, and the interior parts of Southeast Asia. Northern Canada, northern Eurasia, and southern Chile are high latitude zones. Therefore, Southeast Asia is the correct answer as it lies in the low latitude zone where subsistence gathering is practiced.

Question 5.

Choose the correct option related to oil tanker ports of the world.

[1 Marks]

(A) Manchester, Esskhira, Marmagao

(B) Esskhira, Singapore, Manchester

(C) Maracaibo, Esskhira, Tripoli

(D) Maracaibo, Tripoli, Singapore

Explanation: Maracaibo in Venezuela, Tripoli in Lebanon, and Esskhira in Tunisia are tanker ports, as they are specifically mentioned as oil tanker ports in the provided context. Singapore and Manchester are not classified as oil tanker ports in this context.

Question 6.

Two statements are given below. They are Assertion (A) and Reason (R). Read both the statements carefully and choose the correct option :

Assertion (A) : All the developed countries have opened their markets for products from developing countries.

Reason (R) : World Trade Organisation deals with the global rules of trade between nations.

[1 Marks]

(A) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(B) Both (A) and (R) are true and (R) is the correct explanation of (A).

(C) (A) is false but (R) is true.

(D) (A) is true but (R) is false.

Explanation:

The Assertion (A) is false because not all developed countries have fully opened their markets for products from developing countries; there are still trade barriers and unequal conditions that often disadvantage developing nations, as noted in the context explaining how free trade can adversely affect developing countries by not giving an equal playing field. The Reason (R) is true because the World Trade Organisation (WTO) does deal with the global rules of trade between nations, helping regulate international trade and trade liberalisation.

Question 7.

Read the following statements carefully regarding 'tertiary activities' and choose the correct option :

I. Tertiary activities include both production and exchange of services.

II. Tertiary activities involve the commercial output of services.

III. Tertiary activities are directly involved in the processing of raw material.

IV. The examples of tertiary activities are – plumber, doctor, publisher. Options :

[1 Marks]

(A) Only I, II and III are correct.

(B) Only I, III and IV are correct.

(C) Only I, II and IV are correct.

(D) Only II, III and IV are correct.

Explanation: Statements I, II, and IV are correct based on the provided context. Tertiary activities include both the production and exchange of services, involve the commercial output of services, and examples include plumber, doctor, and publisher. However, statement III is incorrect because tertiary activities are not directly involved in the processing of raw materials; that is a characteristic of primary and secondary activities, not tertiary.

Question 8.

Choose the correctly matched pair from the following.

[1 Marks]

(A) Gold collar worker – Senior business executive

(B) Red collar worker – Practicing lawyers

(C) Pink collar worker – Environmental scientist

(D) White collar worker – Mining worker

Explanation: Gold collar workers represent special and highly skilled professions such as senior business executives, government officials, research scientists, and financial and legal consultants. This matches with 'Senior business executive'. Red collar workers are those engaged in primary activities like agriculture, which does not match practicing lawyers. Pink collar workers generally refer to jobs traditionally held by women, often in service sectors, not environmental scientists. White collar workers are professionals working in offices, not manual labor like mining workers.

Question 9. Which one of the following statements is true regarding ‘medical tourism’ in India ?

[1 Marks]

(A) Tourists travel specially for availing cheap medical facilities.

(B) Doctors travel to developed country to do surgical operation.

(C) Doctors travel to treat the patients.

(D) Tourists on trip get treated, if they fall ill.

Explanation: Medical tourism refers to people traveling to other countries, like India, specifically to avail affordable and quality medical treatment. India has become a leading country in medical tourism because of its world-class hospitals and low-cost medical services. Unlike tourists who fall ill during a trip, medical tourists plan their travel to receive medical care.

Question 10.

Choose the right group of states where Dravadian language is spoken majorly.

[1 Marks]

(A) Andhra Pradesh, Telangana and Madhya Pradesh

(B) Tamil Nadu, Kerala and Karnataka

(C) Karnataka, Maharashtra and Andhra Pradesh

(D) Tamil Nadu, Kerala and Maharashtra

Explanation: According to the context, Dravidian languages, specifically South-Dravidian branch, are spoken majorly in Tamil Nadu, Karnataka, and Kerala. The other options include states that belong to Central or North Dravidian groups or Indo-European language areas, which are not major Dravidian speaking regions.

Question 11. During which one of the following phase of population growth in India, negative growth was recorded in a decade ?

[1 Marks]

(A) Phase II

(B) Phase I

(C) Phase IV

(D) Phase III

Explanation: Negative growth in India's population was recorded during the decade 1911-1921, which falls under Phase I (1901-1921). This phase is described as a period of stagnant or stationary population growth due to high birth and death rates caused by poor health services and illiteracy. Hence, the correct answer is Phase I.

Question 12.

Which one of the following set of cities falling on the 'Golden Quadrilateral' are arranged in a clock-wise direction from Delhi ?

[1 Marks]

(A) Delhi, Chennai, Mumbai and Kolkata

(B) Delhi, Mumbai, Kolkata and Chennai

(C) Delhi, Kolkata, Chennai and Mumbai

(D) Delhi, Kolkata, Mumbai and Chennai

Explanation: The Golden Quadrilateral connects four major metro cities of India: Delhi, Mumbai, Chennai and Kolkata. Starting from Delhi and moving in a clockwise direction, the cities are arranged as Delhi in the north, Mumbai in the west, Chennai in the south, and Kolkata in the east. Therefore, the correct clockwise order from Delhi is Delhi, Mumbai, Chennai and Kolkata.

Question 13. Which one of the following cities serve as headquarter of two railway zones ?

[1 Marks]

(A) Kolkata

(B) Chennai

(C) Jaipur

(D) Bilaspur

Explanation: Chennai serves as the headquarters for two railway zones: Southern Railway and Chennai Suburban Railway. None of the other cities listed (Kolkata, Jaipur, Bilaspur) serve as headquarters for two railway zones. This is consistent with Chennai being an important administrative town and transport hub.

Question 14.

Which one of the following is a natural process of land degradation ?

[1 Marks]

(A) Shifting cultivation

(B) Industrial waste

(C) Gully erosion

(D) Mining activities

Explanation: According to the provided context, land degradation can be caused by both natural and human activities. It specifically mentions that types of wastelands such as gullied/ravinous land are primarily caused by natural agents. The other options like mining activities, industrial waste, and shifting cultivation are caused by human actions and are categorized as man-made processes of land degradation.

Question 15.

The loudness of the sound is measured in the unit known as :

[1 Marks]

(A) Millimeter

(B) Decibel

(C) Decimal

(D) Centimeter

Explanation: The loudness or level of sound is measured in terms of decibels (dB). The decibel is a unit used to express the intensity of sound, which directly relates to how loud the sound is perceived. Other options like millimeter and centimeter are units of length, and decimal is a numerical system, so they are not related to measuring sound loudness.

Question 16.

How many of the listed countries fall under Asian continent ?

[1 Marks]

Most populous countries

Sr. No.	Country	Population	% of world
1	India	1,425,775,850	17.4
2	China	1,409,670,000	17.2
3	United States of America	337,975,234	4.13
4	Indonesia	278,696,200	3.41
5	Pakistan	229,488,994	2.80
6	Nigeria	216,746,934	2.65
7	Brazil	219,277,799	2.68
8	Bangladesh	168,220,000	2.06
9	Mexico	128,271,248	1.57

(A) 3

(B) 5

(C) 6

(D) 4

Explanation:

- From the provided list of most populous countries, the **5** that are located in Asia are:

    1. India
    2. China
    3. Indonesia
    4. Pakistan
    5. Bangladesh

Question 17.

Which of the following set of continents is not represented in the table ? Choose the most appropriate option.

[1 Marks]

Most populous countries

Sr. No.	Country	Population	% of world
1	India	1,425,775,850	17.4
2	China	1,409,670,000	17.2
3	United States of America	337,975,234	4.13
4	Indonesia	278,696,200	3.41
5	Pakistan	229,488,994	2.80
6	Nigeria	216,746,934	2.65
7	Brazil	219,277,799	2.68
8	Bangladesh	168,220,000	2.06
9	Mexico	128,271,248	1.57

(A) Australia and Europe

(B) Europe and South America

(C) Africa and South America

(D) Australia and Africa

Explanation:

The table lists tectonic plates associated with several continents: Antarctica, North America, South America, Pacific region, India-Australia-New Zealand plate, Africa, and Eurasia (Europe and Asia) plate. Australia is included through the India-Australia-New Zealand plate, and Europe is part of the Eurasia plate. However, there is no set in the options that excludes both Australia and Europe simultaneously from the plates. Considering combinations, Australia and Europe as a pair are not represented together as separate continents in the table, unlike the other options which do show representation of their continents on different plates. Therefore, the set "Australia and Europe" is the correct answer for continents not represented together in the table.

Question 18.

China and Brazil together account for what percentage of the world population ?

[1 Marks]

Most populous countries

Sr. No.	Country	Population	% of world
1	India	1,425,775,850	17.4
2	China	1,409,670,000	17.2
3	United States of America	337,975,234	4.13
4	Indonesia	278,696,200	3.41
5	Pakistan	229,488,994	2.80
6	Nigeria	216,746,934	2.65
7	Brazil	219,277,799	2.68
8	Bangladesh	168,220,000	2.06
9	Mexico	128,271,248	1.57

(A) 19.88

(B) 19.58

(C) 17.58

(D) 17.88

Explanation:

China = 17.2%

Brazil = 2.68%

Total = 17.20% + 2.68% = 19.88%

Section C

Question 19.

Examine the relationships between the ‘unresting man’ and ‘unstable earth’.

[3 Marks]

Answer: The term **unresting man** refers to human beings who are continuously active and changing their environment through various activities like agriculture, construction, mining, and industries. The **unstable earth** means the earth’s surface is dynamic and constantly changing due to natural processes such as earthquakes, volcanic eruptions, and tectonic movements. The relationship between them is interactive and complex. Human activities often depend on earth’s resources, but they can also increase earth’s instability, for example, deforestation can lead to landslides and soil erosion. In turn, natural disasters from the unstable earth affect human life by damaging settlements

and resources. Thus, human beings and the physical environment influence each other continuously, making it important to understand this relationship to manage resources and risks effectively.

> **Key Points: Unresting man continuously modifies environment - Earth is physically unstable due to natural processes - Human activities impact earth instability and vice versa**

Question 20.

Examine the importance of ‘sustainability’ as a pillar of ‘human development’.

[3 Marks]

Answer: Importance of Sustainability in Human Development:
Sustainability is crucial for human development as it ensures that the opportunities and resources available today continue to be available for future generations. It means using environmental, financial, and human resources wisely without depleting them. This helps maintain ecological balance and prevents resource exhaustion. Sustainable human development focuses on long-term social and economic progress while conserving nature for the future, thus securing well-being for both present and coming generations. Without sustainability, the progress made would be short-lived and could harm the planet and society.
Therefore, sustainability acts as a backbone of human development by promoting responsible use of resources, preserving the environment and ensuring that all generations have equal chances to improve their lives. It also emphasizes understanding the physical environment to avoid ecological imbalance caused by rapid resource use. This concept emerged from global awareness about environmental issues, highlighting the need to combine economic growth with care for nature and social equity.

> **Key Points: Sustainability ensures availability of resources for future generations - Prevents ecological imbalance and resource depletion - Supports long-term social and economic progress - Encourages responsible use of environment and resources - Ensures equality of opportunities across generations**

Question 21.

Explain the main characteristics of urban settlements in India.

[3 Marks]

Answer: Main Characteristics of Urban Settlements in India:
1. **Compact and Large Size:** Urban settlements are generally compact and larger in size compared to rural settlements.
2. **Non-Agricultural Activities:** Most people in urban areas are engaged in non-agricultural activities such as trade, business, industries, and services.

3. **Functional Linkage:** Urban settlements are functionally linked to surrounding rural areas through the exchange of goods and services.
4. **Variety of Functions:** They serve various economic, administrative, educational, and cultural functions.
5. **Dense Population:** Urban areas have higher population density and diverse communities.
6. **Modern Infrastructure:** Urban settlements have better infrastructure like roads, electricity, water supply, schools, and hospitals.
7. **Social and Cultural Diversity:** Urban centers attract people from different regions, leading to a mix of cultures and lifestyles.

Key Points: Compact and large size - Non-agricultural activities - Functional linkage with rural areas - Diverse economic and administrative functions - High population density - Modern infrastructure - Social and cultural diversity

Question 22.

Explain the evolution of towns in India.

[3 Marks]

Answer: Evolution of Towns in India:
Towns in India have evolved over a long period starting from prehistoric times. During the Indus Valley Civilisation, towns like Harappa and Mohanjodaro were well established. After this period, towns continued to evolve through ups and downs until the arrival of Europeans in the eighteenth century.
Ancient Towns: Many ancient towns developed as religious and cultural centres. Examples include Varanasi, Prayag (Allahabad), Pataliputra (Patna), and Madurai. These towns have a history spanning over 2000 years.
Medieval Towns: Towns continued to grow during the medieval period with different influences but details are not specified.
Modern Towns: The British and other Europeans developed many coastal trading ports such as Surat, Daman, Goa, and Pondicherry. Later, they built major cities Mumbai (Bombay), Chennai (Madras), and Kolkata (Calcutta) in British architectural styles. Industrial towns like Jamshedpur emerged after 1850. Post independence, many administrative centers like Chandigarh, Bhubaneswar, Gandhinagar, and Dispur were developed along with industrial towns like Durgapur, Bhilai, Sindri, and Barauni. Some old towns also became satellite towns around big cities.
Thus, Indian towns evolved from ancient religious centres to modern industrial and administrative hubs over centuries.

Key Points: Towns existed since Indus Valley Civilisation - Ancient towns developed as religious and cultural centres - Modern towns developed by Europeans and after independence as industrial and administrative centres

Question 23.

Study the following table carefully and answer the questions that follow :

1. Why is the large difference between primary and tertiary categories of female workers ?
2. Explain the reason of low variation between male workers of 'primary' and 'tertiary' sectors.
3. Why 'secondary sector' has low contribution in India's workforce?

[3 Marks]

Sectoral composition of workforce in India, 2011

Categories	Population			
	Persons	% to total workers	Male	Female
Primary	26,30,22,473	54.6	16,54,47,075	9,75,75,398
Secondary	1,83,36,307	3.8	97,75,635	85,60,672
Tertiary	20,03,84,531	41.6	15,66,43,220	4,37,41,311

Answer: (a) The large difference between primary and tertiary categories of female workers exists because traditionally, women have been more involved in agriculture and related primary sector jobs which are often home-based or community-based and require less formal education. The tertiary sector jobs usually demand higher education, skills, and social mobility which many women have limited access to due to societal constraints.
(b) The low variation between male workers in primary and tertiary sectors is due to men having broader access to different types of jobs, education, and mobility. Many men work both in agriculture (primary sector) and move to service or other tertiary sector jobs, resulting in a more balanced distribution.
(c) The secondary sector has low contribution in India's workforce because industrial and manufacturing development is still growing and not enough to absorb a large workforce. Many workers continue to depend on agriculture or move to the tertiary sector for jobs. Also, lack of infrastructure, investment, and skill mismatch may limit growth of secondary sector employment.

Key Points: Women mostly work in agriculture - Tertiary jobs need skills and education limiting female participation - Men have access to more diverse jobs - Secondary sector is underdeveloped in India - Industrial growth is slow - Skill and infrastructure constraints limit secondary sector employment

---

Section D

Question 24.

"Industries should be located at points where the production costs are minimum." Examine the statement with suitable arguments.

[5 Marks]

Answer: Answer:

Industries aim to maximize profits by minimizing their production costs. Therefore, it is important to locate industries where these costs are lowest. Several factors influence the location of industries:

1. Access to Market: Industries are often located near their target markets to reduce transportation costs and ensure quick delivery of products.
2. Availability of Raw Materials: Industries like steel, sugar, and cement are located near the sources of bulky or perishable raw materials to save on transportation and maintain raw material quality.
3. Labour Supply: Availability of skilled or unskilled labour influences industrial location. Some industries need skilled workers while others may depend on abundant unskilled labour.
4. Access to Energy: Industries require a constant and reliable energy supply which affects their location.
5. Transport and Communication: Good transport and communication facilities help in smooth movement of raw materials and finished goods, as well as in managing business operations efficiently.
6. Govt. Policy: Governments promote balanced economic development by setting up industries in specific areas through regional policies.
7. Agglomeration Economies: Proximity to other industries and leader industries reduces costs by sharing resources and infrastructure.

In conclusion, industries should be located at points where the production costs including raw material procurement, labour, energy, transportation and infrastructure costs are minimum to maximize profit and efficiency.

> **Key Points: Industries aim to minimize production costs - Location near raw materials reduces costs - Proximity to markets reduces transportation costs - Availability of skilled labour influences location - Access to energy and transport infrastructure is vital - Government policies impact industrial location - Agglomeration economies help reduce costs**

Question 25.

"Railway is the mode of land transport for bulky goods and passengers over long distances." In the context of this statement, explain the significance of railways in the world.

[5 Marks]

Answer: Significance of Railways in the World

Railways are one of the most important modes of land transport, especially suited for carrying bulky goods and large numbers of passengers over long distances. They provide an economical and efficient means of transport because trains can carry a large volume of cargo or passengers at the same time, reducing transportation costs compared to road or air transport.

Railways operate on fixed tracks, making them reliable for scheduled transport and less affected by traffic congestion. They are also energy-efficient, reducing pollution per ton of freight or per passenger kilometer compared to roadways.

Internationally, railways connect major industrial and commercial centers, facilitating trade and economic growth within and across countries. For example, countries like Russia use railways extensively, with about 90% of transport occurring by train due to the vast distances involved.

Moreover, railways complement other transport modes by linking ports, airports, and road networks, enabling a smooth multimodal transport system. They are particularly useful for transporting heavy, bulky items such as coal, grains, minerals, and machinery that are not suitable for air transport.

In summary, railways play a crucial role in moving large quantities of goods and passengers cost-effectively over long distances, reducing road congestion and energy consumption, and supporting economic development worldwide.

> **Key Points: Economical and efficient for bulky goods and passengers - Reliable and less affected by congestion - Supports long-distance and heavy freight transport - Energy-efficient and environmentally friendly - Important for economic development and trade**

Question 26.

“Road transport is the most economical for short distances compared to railway.” In the context of this statement, explain the significance of road transport in the world.

[5 Marks]

Answer: Significance of Road Transport in the World:

Road transport is the most economical mode for short distances because it provides flexibility and door-to-door services that railways cannot offer. It is widely used for carrying about 85 percent of passengers and 70 percent of freight every year globally.

Roads are essential for connecting rural and urban areas and supporting local economies, especially in developing countries where railway networks may not be extensive. They allow transportation of goods over short distances quickly and at a lower cost.

Although metalled roads can be used throughout the year, unmetalled roads often become unmotorable during the rainy season, limiting their effectiveness. Yet, roads are still vital for trade, commerce, and tourism by facilitating movement within the country.

Road transport also complements other modes like railways, airways, and ocean freighters. Railways handle large volumes of bulky goods over long distances, airways transport high-value and perishable items, and ocean freighters move international goods.
In summary, road transport plays an indispensable role in daily life by enabling short distance travel, providing door-to-door service, supporting economic growth, and integrating with other transport systems efficiently.

> **Key Points: Most economical for short distances - Provides door-to-door service - Carries majority of passenger and freight traffic - Vital for trade and tourism - Complements other transport modes**

Question 27.

"Generally land-use in a region is influenced by the nature of economic activities." Support the statement with suitable examples.

[5 Marks]

Answer: Answer:
Land use in any region is closely related to the economic activities carried out there. The type of economic activity largely determines how the land in that area is used.

1. Agricultural Activities: In regions where agriculture is the main economic activity, most of the land is used for farming, growing crops, and raising livestock. For example, fertile plains in Punjab and Uttar Pradesh have vast agricultural land because the economy depends heavily on farming.

2. Industrial Activities: Areas with many industries have a large part of their land dedicated to factories, warehouses, and infrastructure needed for production. For instance, the areas around Mumbai and Gurgaon have more land used for industrial and commercial purposes due to the presence of industries and business hubs.

3. Urbanization and Services: In cities, land is used for housing, offices, schools, hospitals, and recreational purposes. Economic activities such as trade, education, and services require land for settlements and infrastructure. For example, metropolitan cities like Delhi and Bangalore have more land under urban use because of the dominance of tertiary economic activities.

4. Changes over time: Economic growth and population increase cause the expansion of non-agricultural land uses, reducing agricultural land. Urban sprawl leads to conversion of farmland into housing and industries. This can be seen near big cities where agricultural land is converted into colonies and industrial estates.

In summary, the nature of economic activities—whether primary like farming, secondary like

industries, or tertiary like services—directly influences land use patterns in a region. This relationship explains why land use varies between rural and urban areas as the economy grows and changes.

Key Points: Economic activities influence land use - Agricultural land use in farming regions - Industrial land use in manufacturing areas - Urban land use in cities for settlements and services - Economic growth leads to land-use change

Question 28.

"The Indian agricultural problems have physical constraints and institutional hindrances." Support the statement with suitable examples.

[5 Marks]

Answer: Introduction: Indian agriculture faces various problems which can be broadly classified into physical constraints and institutional hindrances.

Physical Constraints: These are natural or environmental factors that limit agricultural productivity. For example, small and fragmented land holdings reduce the efficiency of farming operations. Soil degradation and low fertility affect crop yields negatively. Irregular monsoon and dependence on rain-fed agriculture cause uncertainty in production. Lack of proper irrigation facilities in many regions further hampers consistent farming.

Institutional Hindrances: These are problems related to the structure and functioning of agricultural institutions. For instance, limited access to credit and high interest rates force many farmers to take loans from informal sources leading to indebtedness. Inefficient distribution of agricultural inputs and subsidies affects productivity. Inadequate storage facilities and poor market access lead to post-harvest losses and low income for farmers. Also, insufficient extension services prevent farmers from adopting modern techniques.

Conclusion: Thus, Indian agriculture is plagued by both physical hurdles like land fragmentation and climate variability and institutional problems such as lack of credit and poor market infrastructure. Addressing both these issues is essential for improving agricultural output and farmer welfare.

Key Points: physical constraints like small land holdings and irregular rainfall - institutional hindrances such as lack of credit and poor market facilities - overall impact on agricultural productivity and farmer income

Question 29.

Explain the significance of petroleum as major source of energy and describe its distribution in India.

[5 Marks]

Answer: Significance of Petroleum as a Major Source of Energy:
Petroleum is a very important source of energy because it provides fuel for many internal combustion engines used in automobiles, railways and aircraft. It is also processed to produce various by-products used in petrochemical industries such as fertilizers, synthetic rubber and synthetic fibres. With the growth of gas infrastructure, natural gas from petroleum is becoming increasingly important as a cleaner fuel for transport (CNG) and cooking (PNG) in homes. Petroleum fuels the development of transport, industry, agriculture, and other sectors, making it vital for the economy.

Distribution of Petroleum in India:
In India, petroleum reserves are mainly found in sedimentary basins. Major oil fields are located in Assam, which is the oldest oil-producing region, Gujarat, and the Mumbai High field which is an off-shore oil field in the Arabian Sea. Recently, new discoveries of petroleum reserves have been made in places like Tamil Nadu (Kanniyakumari), Kerala (Alleppey), Maharashtra (Ratnagiri), and West Bengal (Purulia and Bankura). These regions contribute significantly to India's petroleum production. India is also expanding natural gas pipeline networks under the 'One Nation One Grid' initiative by GAIL, improving the distribution and availability of natural gas across the country.

> **Key Points: Petroleum is a vital energy source for engines and industries - Provides important by-products for petrochemical industries - Major petroleum reserves in Assam, Gujarat and Mumbai High region - New reserves found in Tamil Nadu, Kerala, Maharashtra and West Bengal - Natural gas distribution expanded under One Nation One Grid initiative**

Question 30.

Explain the significance of iron-ore as industrial raw material and describe its distribution in India.

[5 Marks]

Answer: Significance of Iron-Ore as an Industrial Raw Material:
Iron ore is a crucial raw material for the production of iron and steel, which are the backbone of heavy industries and infrastructure development. It is essential for manufacturing machinery, automobiles, construction materials, and tools. India has abundant iron ore reserves which help support its large steel industry, contributing significantly to the country's economy and industrial growth. The availability of iron ore near coal fields lowers transportation costs and encourages the establishment of integrated steel plants.

Distribution of Iron Ore in India:
India is rich in iron ore reserves, having the largest deposits in Asia. The two main types of iron ore found are haematite and magnetite. About 95% of India's iron ore reserves are concentrated in the states of Odisha, Jharkhand, Chhattisgarh, Karnataka, Goa, Telangana, Andhra Pradesh, and Tamil Nadu.
In Odisha, iron ore is found in hill ranges of Sundergarh, Mayurbhanj, and Jharsuguda districts.

Jharkhand and Chhattisgarh are also important mining areas in the eastern plateau region, rich in iron ore and other minerals such as coal and manganese. The South-Western Plateau region, including Karnataka, Goa, Tamil Nadu, and Kerala, is another major belt rich in iron ore and bauxite.

The close proximity of iron ore mines to coalfields in eastern India provides an advantage for the steel industry, making this region a major hub for iron and steel production in the country.

Key Points: Iron ore is essential for steel production and industrial growth - Major iron ore types are haematite and magnetite - 95% of reserves found in Odisha, Jharkhand, Chhattisgarh, Karnataka, Goa, Telangana, Andhra Pradesh, Tamil Nadu - Odisha's Sundergarh, Mayurbhanj are key mining areas - Proximity to coalfields aids steel industry development

Question 31.

Analyse the importance of Indian seaports in the development of international trade.

[5 Marks]

Answer: Importance of Indian Seaports in International Trade:
India has a vast coastline of approximately 7,517 km with 12 major ports and over 200 minor or intermediate ports. These seaports act as gateways for international trade, handling about 95 per cent of India's foreign trade by volume and 70 per cent by value. Historically, Indian ports have been in use since ancient times and gained significant importance after the arrival of European traders and British colonisation.

Seaports provide a smooth and cheap mode of transportation owing to the water routes, facilitating the movement of goods. The development of ports with modern infrastructure has significantly boosted international trade by enabling the handling of large volumes of exports and imports efficiently. Major ports are regulated by the central government which ensures policies supporting trade growth.

Furthermore, ports like Mumbai, Chennai, Kolkata (Diamond Harbour), and others have vast areas of influence, connecting India with global markets. These ports have been crucial in integrating India into the world economy by importing raw materials and exporting finished goods.

In summary, Indian seaports play a crucial role in economic development by supporting international trade, enhancing connectivity, and providing infrastructural facilities that help India maintain and expand its trade relations globally.

Key Points: India has long coastline with 12 major and 200 minor ports - Seaports handle 95% of foreign trade by volume and 70% by value - Ports provide cheap and efficient transport facilitating exports and imports - Modern infrastructure modernises trade

operations - Central government regulates major ports supporting trade growth - Important ports connect India to global markets

Question 32.

Analyse the changing pattern of India's international trade.

[5 Marks]

Answer: India's international trade has undergone significant changes over the years.
In 1950-51, the total external trade of India was worth Rs. 1,214 crore. By 2020-21, this value increased drastically to Rs. 77,19,796 crore, showing a tremendous growth in trade volume.

The nature of India's imports and exports has changed over time. Although the total volume of imports and exports has increased, the value of imports has generally remained higher than exports. This trade imbalance highlights the need for India to boost exports.

India's contribution to world trade is about one per cent, which is low compared to its economy's size. However, India plays a significant role in the world economy.

In recent years, India has taken several measures to improve its trade performance, such as import liberalisation (making imports easier), reduction in import duties, delicensing (reducing government control on industries), and shifting patent laws from process patents to product patents.

India aims to double its share in international trade within the next five years through these initiatives.

Moreover, the direction of trade has also changed with India strengthening trade relations with major partners across different regions, indicating diversification in its trading partners.

Thus, India's international trade pattern shows remarkable growth in volume, diversification in trade partners, and a change in import-export composition supported by policy reforms aimed at enhancing trade competitiveness globally.

Key Points: Significant growth in trade volume since 1950-51 - Imports value higher than exports but total volume increased - Policy reforms like import liberalisation and reduction in duties - Aim to double share in world trade - Diversification of trading partners and shift in import-export composition